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FOR A SOUTH-WIDE COTTON WAREHOUSING SYSTEM.

ENTHUSIASTIC meetings in the Carolinas within the past few days and the appointment of a committee of organization representative of the cotton interests with a view to working out the details of a comprehensive cotton warehousing system for the South are the promise of a definite step forward in the plan which has been considered for nearly twenty years and which has been put into execution at several important points. It is hoped that the present project may take permanent form at the time of the annual convention of the American Cotton Manufacturers' Association in New York next month. It was outlined at an informal gathering last week at Charlotte when J. B. Duke of New York met a number of leading cotton manufacturers. It looks to the formation of a co-operative body owning a chain of warehouses for the benefit of farmers, merchants and manufacturers and utilizing available existing warehouses and other facilities. This warehousing system will involve the receipt, the weighing, sampling, grading and insured storage of bales of cotton, the issuance of warehouse receipts for them, a system of sealing, inspecting and auditing, and a certification of the warehouse receipts by banking interests of such a standing as to guarantee the integrity and quality of the collateral represented by the receipt, the whole system to be under a board of directors and managing officers chosen from banking and financial centers entirely free from connection or alliance with the users of the warehouse.

Just about ten years ago, with the growing realization in the South that everybody concerned would be benefited by a proper financing of the great staple, the plan of the warehousing system was widely discussed. At that time Col. T. G. Bush of Birmingham, a leader in manufacturing and finance in the South, wrote to the MANUFACTURERS RECORD as follows:

There is but one solution, I think, of this trouble, and that is a strong system of warehouses at a number of points in the South, accessible to the planter, in which he can store his cotton on reasonable terms and secure a receipt that is so protected by a strong guarantee or bonding company as to enable him to use it as a collateral, securing the lowest reasonable rate of interest. A system like this is not only valuable to the farmer, protecting him so that he may sell as his judgment may dictate, but it is helpful to the spinner, enabling him to carry his stock in such a way as to avoid unnecessary risk on the market and without excessive rate of interest. That some plan of this kind will and must be adopted I do not doubt, and the sooner it is taken hold of by parties capable and strong enough financially to carry it out the better it will be for all concerned. I believe that at many points local interests would promptly co-operate with

other parties in establishing a warehouse system of this kind.

About the same time, and dealing with the same subject, D. A. Tompkins of Charlotte contended that it is not in the interest of the Southern farmer or of the cotton-growing States to undertake to maintain cotton at so high a price as to stimulate large production in other countries; that a fair average price will hold the monopoly of cotton growing in the United States, and that a corporation should be formed with sufficient capital and a large enough field of operation to accomplish average results upon the principle underlying insurance. He argued that the plan would eliminate the speculator and would vastly benefit farmers, merchants and consumers. It is interesting to recall that more than sixty years ago the Cotton Planters' Convention at Tallahassee, Fla., urged as a remedy for the difficulties of cotton growers the chartering by the States of South Carolina, Georgia, Alabama, Louisiana and Florida of a corporation with a minimum capital of \$20,000,000, to be increased as business occasion required, to erect or purchase extensive cotton warehouses at Charleston, Savannah, Mobile, New Orleans, Appalachicola and St. Marks. That was in 1851, and although success has been gained in several forms of modification of the plan, it has never been carried out within the range of its full possibilities. Therefore, millions of persons will await with interest the outcome of the present movement, which is designed to enable the grower to store and hold his cotton in safety at the cheapest rates of interest when the market price is not satisfactory to him, to enable the cotton merchant and broker to obtain at reasonable rates the money to make his purchases and to carry them, and to enable the manufacturer to assure himself of his year's supply of the staple according to his judgment. A cotton warehousing system of the kind, operating over the whole South, incorporating within itself existing facilities and contemplated ones, such as the \$3,000,000 public system at New Orleans, and dominated by the spirit of co-operation, would tend immediately to adjust conditions for growers, buyers, transportation agencies and manufacturers by spreading the movement of cotton to market over the whole year and saving it from the evils of the rush of the first three or four months of every season.

The cotton manufacturers and others in the Carolinas are encouraged by the fact that Mr. Duke, who has been so effective in other lines of material development in this section, has found time to manifest again interest in the plan.

PANAMA CANAL TOLLS AND PEACE.

WHETHER or not one may favor the exemption from Panama Canal tolls of vessels engaged in the coastwise trade of this country, there is no reason for the discovery of anything reprehensible in the mere fact that the Carnegie Endowment to Promote International Peace had set aside a fund of \$23,000 to be used in circulating literature designed to influence public opinion in favor of a repeal of the exemption. More than a million copies of a pamphlet on that line have been distributed by the Carnegie Endowment. There is nothing immoral or illegal in that, provided the literature has been an expression of honest opinion and has not contained misleading statements. No one receiving the literature has been under compulsion to read it or to give it wider distribution by reproducing it in print. About the only legitimate means of furthering any cause is to give publicity to it by means of speech or printed publication. It is in the give and take of such publicity that healthy public

opinion is created, and it is for intelligence, which is essential to healthy public opinion, to determine through acquaintance with the inspiration of the literature and the agency of its circulation what value the argument may possess.

This is, of course, without regard to the merits of the question of exemption from Panama Canal tolls or of the organized movements for international peace, the best financed one of which, perhaps, is through Carnegieism. The MANUFACTURERS RECORD has felt all along that the agitation against the tolls exemption has not been in the interest of the United States, and has contended that, if the exemption clause contravenes the letter or the spirit of the Hay-Pauncefote treaty, it is only one of the illustrations of the subordination for several years in the beginning of this century of our State Department to the British Foreign Office; that, nevertheless, international morality compels us to abide by our bargain, even though Pauncefote may have easily outwitted Hay; but that, instead of eliminating the exemption, we should extend it to the vessels engaged in the coastwise trade of all countries. That would do away with all occasion for a charge of discrimination in favor of vessels of the United States.

As to international peace, the unregenerate mind, that is, the mind that refuses to be obsessed by the use, in promotion of many "causes," of enormous sums of money or the assembling of a large number of names of individuals temporarily occupying a spotlight space in headlines of newspapers at top of columns next to pure reading matter, and therefore, temporarily great, cannot rid itself of the impression that the past fifteen or sixteen years, in which there have been the most pronounced and the most strenuous movements for international peace, have been marked by some of the most unnecessary and most cruel wars in modern human history. That some of the individuals most active in peace movements and other humanitarian movements on a wholesale scale may have been among the chief material beneficiaries of these wars and other unsocial developments does not relieve the unregenerate mind of the impression. As a matter of fact, it is quite difficult for an intelligent man making an honest living in the ordinary pursuits of life, and hence not in a position to be dazzled or attracted by the dangled dollars of wholesale "philanthropy," to rid himself of the conviction that such wholesalerism can have no ultimate good. Such philanthropy may remedy some physical ills or advance some material advantages, but it must at the same time paralyze individual initiative, create a wholesale spirit of dependence, confuse the verities of life and lower the whole morale of the people. Perhaps if there was not so much money available to promote talking about peace, the world would be able to get closer to peace.

PUBLIC IMPROVEMENT BONDS AS INVESTMENTS.

IT will be interesting, when sufficient material for a proper study has been accumulated, to note the effect of exemption from the Federal income tax of the interest on the bonds of the United States, of States and of political subdivisions of States as an accelerator of investments in securities of that kind. Although in many parts of the country there are restrictions, almost prohibitory in some cases, upon the issuing of bonds for public improvements, there is a steadily increasing tendency to add to the volume of such issues and to relax the restrictions, and, under favorable conditions, for the bonds to be readily marketed. Quite a typical instance was the sale last week of \$500,000 of good-roads bonds of

Mercer county, West Virginia. In all ten bids for the bonds were made. Two of them were conditioned upon the proceeds of the sale being deposited in certain banks until used for the building of good roads. One of these bids was \$519,900 and the other \$510,625. These two bids, together with one of the eight bids without restrictions, were not successful. The bonds were awarded to a savings bank and trust company of Cincinnati at a price of \$506,253. To the prosperous condition of Mercer county is attributed the interest shown in this bond issue by representative bond houses, with the bids ranging from 101.25, the successful one, to 100.42, and with one firm offering as high as 102.39 for one-fifth of the issue.

Hillsborough county, Florida, has recently been quite successful in the sale of bonds for construction of school buildings to a Chicago firm, receiving on the sale of three issues aggregating \$38,000 not only par and accrued interest, but an aggregate premium of \$2279.

For an issue of \$100,000 of 30-year 5 per cent. bonds of the city of Gastonia, N. C., there were quite a number of bids from different parts of the country, but the issue, of which \$25,000 are for school buildings, \$55,000 for sidewalks and streets and \$20,000 for water and light, was purchased for \$101,050 by local National banks.

This suggests that, everything else being equal, the marketing of public securities at home is one of the best evidences that a community can give of that faith in its future upon which the desirability of such bonds as an investment rests. There are times in periods of depression when there is a narrow market even for the most attractive kind of bonds, although the money must be obtained to carry on necessary improvements that have reached a stage where suspension of work would mean loss. There are, too, communities which are unable to carry the burden of direct taxation for the purpose of raising funds to make improvements that are bound to enlarge the basis of taxation, and which, consequently, must resort to the issue of bonds for the purpose, additional justification being had in the fact that inasmuch as the coming generation is to enjoy the ultimate benefits of the improvements furthered by bond issues, it is quite fair that the burden of taxation should fall partly upon it. Great as has been the progress in public improvements in the past ten or fifteen years in city and in country, a vast amount of work of the kind is still to be done, and the most effective means of furthering it seems to be the bonding of the State or the community, and where that is done conservatively, with provision for the final liquidation of the debt and with due regard for the possibilities of development in the proposed improvements, comparatively little difficulty will be had in marketing the securities.

RAILROAD EXPENDITURES AT MEMPHIS.

ATTENTION is especially directed to the importance of Memphis as a railroad center by the recent decision of the Southern Railway Co. to make notable improvements there, spending from \$600,000 to \$700,000 for the construction of a classification yard and correlative facilities. Besides the Southern, there are a number of other trunk lines entering the city, including the Illinois Central, the Yazoo & Mississippi Valley, the St. Louis & San Francisco, the Mobile & Ohio, the St. Louis, Iron Mountain & Southern, the Rock Island, the Louisville & Nashville, the Nashville, Chattanooga & St. Louis, and the St. Louis Southwestern railroads. All of these have made expenditures in Memphis within the last few years, and the rapidly expanding traffic moving through the city promises to compel them to make still greater appropriations for work there in the near future.

Just at present the most conspicuous piece of railroad construction under way at Memphis is the erection of another great bridge across the Mississippi. The cost of this structure, together with the terminal, which is a necessary adjunct of it, is estimated at about \$5,000,000. The contract for the steel that will form the superstructure has just been awarded; but, notwithstanding that all haste is being made to complete the work, it will not be ready for service until the autumn of next year at the earliest, although the substructure is well advanced. This is to be known as the Rock Island,

or J. T. Harahan memorial bridge, but several other roads will also use it. The Rock Island is also doing other terminal work in the city.

This bridge and terminal is but one of several notable bits of railroad engineering and construction which have distinguished Memphis of late years. The others include large yards built by the St. Louis & San Francisco Railroad immediately south of the city; the construction of yards, together with roundhouses, by the Illinois Central Railroad at South Memphis, which are now being finished; then the Southern, the Louisville & Nashville, the St. Louis Southwestern, the St. Louis, Iron Mountain & Southern, and the Nashville, Chattanooga & St. Louis railroads united in building the new union station, while the Illinois Central is completing a large station for itself, and, in addition to all this, the last-named railroad has begun construction of second track north of Memphis and will likewise build second track from the city southward to Lake Cormorant, Miss. The St. Louis, Iron Mountain & Southern finished and put in service its long-projected cut-off from Memphis to Marianna, Ark., and it has also improved other parts of its line in that region. The Frisco (St. Louis & San Francisco), the Louisville & Nashville, and the Nashville, Chattanooga & St. Louis are similarly putting betterments on their roadbeds and tracks in the same general locality.

Thus it appears that within the last two or three years the railroads entering Memphis have spent and are spending there and in that vicinity \$10,000,000 or more for new construction, improvements and betterments. Moreover, there is prospect of early demands for more expenditures to meet the requirements of business.

MANUFACTURING OPPORTUNITIES IN NORTH CAROLINA.

STUDY of the twenty-seventh annual report of the Department of Labor of North Carolina cannot but impress one with the wonderful opportunities in that State for industrial development, not that great advance has already not been made, but because that very advance has demonstrated clearly the possibilities. Between 1900 and 1913 the cotton mills reporting to the department increased their capital from \$22,397,412 to \$52,351,800, the number of employees from 38,637 to 56,332, and the amount of power used from 53,455 to 136,536 horse-power. Between 1902 and 1913 the furniture factories reported increased their capital from \$1,575,150 to \$3,267,355, the number of their employees from 4095 to 6366, and the amount of power used from 6486 to 9730 horse-power, and between 1900 and 1913 miscellaneous factories reporting increased their capital from \$3,221,100 to \$83,153,896, the number of employees from 6452 to 36,654, and the power used from 14,754 to 82,614. Reports were had in 1913 from 1078 industrial establishments, of which 948 report an aggregate capital of \$143,588,486, 1025 report 108,905 employees, 1047 report 236,300 horse-power used, and 942 report an output of \$186,295,118. The industries reporting cover about 58 per cent. of the manufacturing capital of the State and 77 per cent. of the value of manufactured products, a fair estimate being \$247,000,000 manufacturing capital and \$245,000,000 manufactured output. This estimate is based upon the advance made in the past five years, the census of 1909 showing \$217,183,000 capital and \$216,614,000 value of products.

The most significant fact, perhaps, in the report is the notable increase between 1900 and 1913 in the capital of miscellaneous factories from less than \$3,500,000 to more than \$83,000,000, with an output having in 1913 a value nearly \$23,000,000 greater than the value of the output of the cotton mills. This increase has been accompanied by a tendency to diversification in industry reflected in the following products:

Bagging of jute, barrels, staves and headings, bed rails, bent wood, blank books, boats, box shooks, brass castings, bread, bricks, brooms, buggies and surries, building blocks, business wagons.

Canned goods, ceiling and flooring, china clay, coffins and caskets, confections, cornices, skylights and ventilators, corrugated metal, cotton bagging and ties, cotton presses and gins, cotton-waste products, cotton-oil machinery, cottonseed oil, meal and

hulls, crates and packages for fruits and vegetables, cribs and cradles, cross-arms, cut mica.

Dressers, chiffonniers, washstands, sideboards and buffets, drain tile, drugs.

Elevators and hoisting machinery, excelsior, extracts.

Farm implements, farm wagons, feather beds and pillows, felts, bats and camel's hair shoddy, fertilizers, fish scrap and oil, flour, meal and feed, foundries and machine shops.

Granite products, grates, grist mills, ground mica.

Hickory handles, hollowware, horse collars and harness, humidifiers.

Ice, interior house trimmings, iron castings, cylinders and tanks.

Lathes and drills, laths, laundry work, leather and leather goods, lime, locomotives and engines, loom reeds and specialties, lumber.

Marble and stone work, marine work, metal culverts, mirrors, molding.

Oak belting, etc., overalls.

Pails and tubs, paints and varnishes, paper boxes, pants, pitch-pine products, planing, plasters, plow handles, plug tobacco, printing and engraving, pumps.

Reed organs, rubber stamps.

Saddlery, safes, sashes, blinds, etc.; sawmills, school desks, school doors and windows, seed planters and fertilizer distributors, sewer pipe, shoes, showcases, shuttleblocks, smokestacks, smoking tobacco, spokes, springs, mattresses and cots, staves, steel ranges, stoves.

Tanning extracts, textile machinery, tile, tobacco flues, trucks, turpentine and naval stores.

Veneers, vehicles and vehicle parts.

Washboards, wood pulp, woodworking machinery.

This list shows clearly that while considerable progress has been made in utilizing the natural resources for manufacturing industries with the greatest tendency to diversification in textiles and in woodworking, the call is still for more attention to be given to finished products in many lines. This is emphasized by the fact that of the total value of manufactured products in 1909, amounting to nearly \$217,000,000, more than a third, or \$79,000,000, represented textiles; nearly \$40,000,000 tobacco manufactures, and more than \$23,000,000 lumber and timber products, the three lines aggregating 68 per cent. of the total.

MISEDUCATION AND UNEMPLOYMENT.

CONDONERS of the lawlessness manifested by some of the groups of the "unemployed" in New York have, without intention, helped to confuse the issues in the problem of unemployment. They have made it the more difficult to discriminate between men unemployed because they are not in touch with opportunities for work which they are willing and able to do and men unwilling and unable to do legitimate work. Both classes are worthy of sympathy as long as they are law-abiding, the one being victims of economic conditions which only the widest sort of knowledge and the wisest sort of action can remedy, the other being victims of "uplift" movements which have sought to promote essential morality by special legislation through appeals to the emotions instead of to the mind. The men unfitted for productive work or unwilling to engage in it, the most baffling element among the unemployed, are really the records of two generations of miseducation.

Among the most effective agencies in the creation of the present problem of unemployment have been the ill-considered agitations of the past twenty-five or thirty years looking to artificial limitations of opportunities to labor honestly, postponing the time when the rising generation might be able to learn to labor truly to get their own living and developing a state of mind that regards labor as an evil to be avoided, if possible, but, if unavoidable, to be shirked and slighted.

Groping rather blindly for expression of the innate sense of justice in mankind, organized labor has made the mistake of teaching in its own program the far, far greater body of unorganized labor to subordinate individual efficiency to minor considerations as the aim in exertion.

To that post-graduate, practical education, trending away from the desire to do one's best, has been added the misdirection of the minds of the individuals who in unartificial conditions would ordinarily

be expected to replenish the ranks of workers valuable to themselves and to their fellows. The whole inclination of pedemagogy, the educational politics which has largely substituted fadpatter for teaching, has been to extend to the farthest limit possible the formal school life of minors, keeping them occupied with books beyond the time when they should be concerned about things and actions having a definite bearing upon their future life, and, consequently, encouraging them to aspire to non-productive pursuits, non-muscular occupations, such as the so-called professions, overcrowded by inefficients. The result is that hundreds of thousands have missed the chance to be trained for pursuits for which they are naturally fitted and for which there is an urgent call.

Instead of going to the heart of this evil and restoring formal school education to its legitimate and useful limitations, the "experts" have sought to meet recognition and criticism of the evil by superimposing upon the staggering public-school curriculum many fads, of which "vocational" education is the latest, assuming to fit the rising generation for productive careers. In this the "experts" have been feeding the fever instead of suppressing it. The only proper place for "vocational" education is in the occupations, subject, of course, to changes and improvements that have been made, in which the fathers and grandfathers of the children of today learned to make an honest living.

It would be interesting to compare the increase in the past twenty years in the number of salaried professional "uplifters" of society with the increase in the number of confessedly unemployed because of unfitness, through "uplifting," for honest employment.

A HERRING ACROSS THE TRAIL.

CONGRESSMAN JOHN W. LANGLEY of Kentucky is reported by the *Louisville Times* as having discovered that a secret organization in Europe has boycotted Kentucky, and as saying that maps are being distributed throughout Europe with certain States, including Kentucky, printed in black. If Congressman Langley can produce such a map fully authenticated he will relieve the mind of a young Maryland Congressman stirred up about a month ago by a somewhat similar statement incontinently projected at Baltimore, and also the mind of the projector of the statement. Both Congressman Langley and the Baltimore projector believed that such a map is being circulated in Europe, but, as the *MANUFACTURERS RECORD* has pointed out, both of them are very likely hitting a cold trail, if, indeed, they are not unwittingly dragging a herring across a warm trail. The European boycott has a familiar aspect, also, of the herring-dragging character. It may be safely said that no State of this country need bother itself about any "secret organization" in Europe seeking to boycott it. Congressman Langley apparently believes in the existence of such a terror, but investigation on his part will probably discover that the report of such a boycott is floated for the purpose of preventing national legislation for the checking of immigration to this country of classes of Europeans who would prove only a curse to this country, as they are to their own. The black map and the European boycott are so ancient in the international lobby for the promotion of unrestricted immigration to this country that it is difficult to understand how they are still able to circulate without the aid of an ambulance.

Much Quoted.

M. G. Harrison, Clerk of the Circuit Court, Centerville, Mo., writes to the *MANUFACTURERS RECORD* that he has seen that publication quoted oftener than any other except Shakespeare and the Bible.

Alabama Coal Production.

According to the report of Chief State Mine Inspector Charles H. Nesbitt, 17,884,745 tons of coal were mined in Alabama last year, an increase over 1912 of 1,371,705 tons. The 1913 production was worth about \$24,000,000. It is estimated that under favorable conditions this year's output may reach 21,000,000 tons.

Texas Bankers In Touch With Farmers

[Special Correspondence *Manufacturers Record*.]

Fort Worth, Tex., March 14.

Very interesting and very significant is the spirit shown by Texas bankers in their words and work in behalf of the biggest, broadest and most permanently successful upbuilding and development of the agricultural, industrial and commercial interests of Texas. I have recently attended a series of district meetings, held at seven different and widely-separated points, under the auspices of the district divisions of the Texas Bankers' Association. Part of the trip was made with special Pullman sleeping and dining cars, which carried an average of 40 people between stops. Officers of the Texas State Bankers' Association and representatives of the leading banks of New York, Chicago, St. Louis and Kansas City, also Houston and other Texas cities, accompanied the train from the start at Houston to the finish at Fort Worth, and local bankers were occasional trippers along the route. There were stated meetings, with programs of speaking, luncheons and dinners, at the district cities selected. There was serious discussion, in public speeches and debate, of the relations between the bankers of the cities and the towns and the farmers, planters and stock-raisers of the State; of the probable benefits of the universally commended new currency law; of crop prospects and the immediate outlook for improved business, and even of the income tax measure, which was conceded on every hand to be impossible of clear understanding and intelligent interpretation.

This trip of the "flying squadron," as it is known in the ranks, is an annual event, of several years' standing, and preceded by some weeks the membership meeting of the State association. While there are features of the picnic and the relaxation from the daily grind, there is an undercurrent of very serious purpose pervading the entire affair. The representatives of the Metropolitan banks—in most cases Southern bankers who have been secured by the banks of the larger cities because of their knowledge of men and conditions in the South—take this occasion to visit with the big and little bankers of the State who are present or possible correspondents, and who are likely to be in attendance in quite a representative way at their district meetings. While it is true that district meetings of State bankers' associations are held in a number of States now, and in some others of the Middle West States, a special train of local and visiting bankers makes the rounds, as in Texas, yet nowhere is the interest so Statewide as in Texas, and nowhere are there such numbers of interested members, a fact suggested by the returns under the new currency law. Texas being second only to Pennsylvania in the number of national banks making application for membership in Federal reserve banks. It is also a fact not generally known that the bankers all over the country are discussing at their organization meetings measures that will result in far-reaching, permanent benefit to the prosperity and welfare of not only the financier, the banker and the broker, but to the merchant, and most particularly to the man who tills the soil and raises the meat and the foodstuffs of the nation.

In these Texas district meetings of bankers the dominant tone was helpfulness to the producer. The work of the Texas Bankers' committee on agriculture was featured and emphasized, and illuminating reports on the achievements of the past two or three years were made. In each of the seven banking districts there are district organizations, with a district chairman, working through and under the State committee. Interest in permanent demonstration agents and demonstration farms is worked up in localities, with the result that over 100 Texas counties now have demonstration agents and demonstration farms, and the farmers are being taught that with scientific methods as much can be raised on half the number of acres cultivated by old methods, leaving half the land for beef cattle, hogs and dairy cattle and forage crops.

A typical illustration of changing conditions was given in a report at the San Angelo meeting. The principal industry in this section has been the raising of cattle and sheep. Under the inspiration of the demonstration agent, 45 silos have been installed in this one county, Tom Green; 35 more are contracted for to be built this year, and in the section there are 200 altogether. A creamery has been established and a start made in the general direction all Texas is going toward, to wit, reducing the millions of dollars annually expended for butter made elsewhere. The silo did not gain foothold in Texas generally till 1911 and 1912. There are

now over 1200 in the State, and it is declared the time will come when the silo will be regarded as a necessity on every farm where livestock is raised. Not only, as has been demonstrated on the great King and Taft ranches most conspicuously and conclusively, does the silo make it possible to sustain and fatten more cattle from an acre of forage than can be done on 40 to 100 acres of a grass range, but it also enables the farmer, planter, stockman and dairyman to provide against disaster through possible droughts by cutting ensilage crops while they are succulent and green.

Another strong tendency was demonstrated when a speaker at one of the meetings, himself a country banker, was enthusiastically applauded when he declared:

"We in the cotton counties must exert all our influence to induce the cotton planter to raise crops to sustain his family and his livestock while his cotton is maturing. When the cotton planter comes to us for his advances in the beginning of the season, the vital question we should put to him would be, 'What arrangements have you made to support yourself and family while you are making your cotton crop?' and we should see that he is instructed and financed in the raising of foodstuffs, instead of having to go in debt for the meat, groceries and feed for livestock necessary to carry him over."

There was also much discussion of the importance of the banker insisting on the better treatment of cotton in the country. Much time and money would be saved if every cotton gin should provide a covering for cotton, both before and after ginning and baling, it was demonstrated. In wet weather it is often impossible to gin cotton, and after it is ginned it is allowed to stand on the ground or in the open, with inevitable deterioration and loss. Systematic and standard requirements for the proper handling of cotton at gins and in warehouses and cotton sheds could be inaugurated if the bankers would unite and compel the observance of the most obvious and ordinary precautions.

Another suggestion was strongly urged, to the effect that cotton warehousemen should be required by statute to bond themselves sufficiently heavy to make them responsible for the delivery of all cotton received, so that a banker would know, when he was asked to advance money on a warehouse receipt, that a real bale of cotton, and of the grade stated, would be deliverable when required.

As to the workings of the new currency law, the formation of Federal reserve districts and the location of Federal reserve banks, there were differences of opinion expressed, both in public and private discussion.

There was a decided difference of opinion as to what extent interior banks will be able to rediscount commercial paper, some contending that the door had been opened to practically unlimited rediscounting by any individual bank, which provided possibilities for inflation and reckless operations, while others considered that sufficient checks and supervision were provided to obviate any serious danger of unsafe rediscounts.

As to the advantage to any particular community in being designated as the location of a Federal reserve bank, it was frequently declared by the visitors that such benefit will prove to be largely imaginary and sentimental. There will doubtless be branch banks in every city that is important enough to be considered a candidate for a reserve bank, and the practical advantages will be substantially identical.

The general public, it was declared, would not be able to notice that a change in systems had occurred, so far as any outward physical appearances would indicate. The same old buildings, the same old names and the same old officers would be found on hand, and whatever changes in the form and issuance of bank notes are made will be slow in coming and gradual.

Interior banks will not carry balances in as many cities as at present, it was believed, the necessity for more than two correspondents not being apparent. Metropolitan banks, therefore, would be even more active than at present in efforts to secure and hold the accounts of other banks.

Everywhere business conditions and crop prospects were subjects of inquiry. So far as can be foretold now, every indication is most favorable for a banner year in Texas farms, fields and ranches. The ground is thoroughly soaked, and early sales of implements, seed, etc., indicate a heavy planting to be done. While there were devastating floods in the valleys of the Brazos and Colo-

rado rivers last winter, they came early enough to not interfere with plowing, and deposits of silt are declared to have more than offset the damage done in many cases. Late northers have nipped early truck and some fruit buds, but there is plenty of time to recoup this inferior loss.

On the other side of the shield, the facts show up that everybody in Texas is "middling" hard up, right now. Fine crops were almost the universal rule in Texas last year. When the crop had been made the temptation to borrow a little more money from the bank was great, and with the cotton in the field, all ready to be picked, the banker felt justified in making the advance requested. Before the cotton picking had got under way, however, the rainiest season for 20 years set in, and never did really let up till near the end of the year. Much of the cotton was beat down and destroyed in the fields, a large part of that gathered was so damaged that it was off grade and in slow demand, the standard-grade cotton of other cotton States taking precedence in the market, and the result has been a deficiency of about \$100,000,000 in the amount expected to be realized from the 1913-1914 cotton crop of Texas. The farmer is still largely in debt to the banker, and frequently to the storekeeper, and the country banker owes the city banker, and so on up the line. Thus it is conceded that it will take another harvest to make times easy all around down here.

But nobody has any apprehension about possible panics now, as they had up to the end of last year. It is believed that the new currency law has steadied financial conditions for all time; that its provisions will be helpful everywhere, and as for Texas, it is believed the greatest year of her career is now being lived.

ALBERT PHENIX.

The Birmingham Iron Market.

[Special Correspondence Manufacturers Record.]

Birmingham, Ala., March 14.

Within the past 10 days from 35,000 to 40,000 tons of pig-iron have been sold in the Birmingham district, but none of the orders have been heavy ones and the shipments being to all parts of the country. Prices are firm at the same figure as last quoted—No. 1 and No. 2 foundry soft at \$11.25 to \$11.50 f. o. b. Birmingham. The only big shipment was for export, the Tennessee Coal, Iron & Railroad Co., when 2700 tons of foundry iron was sold to Japan interests, and the shipment went through the port of Mobile. Some of the stocks on the yards have been reduced during the week, but to no appreciable extent.

The following are the prices gross ton f. o. b. cars Birmingham:

No. 1 foundry and No. 2 soft, \$11.25 to \$11.50.
No. 2 foundry and No. 2 soft, \$10.75 to \$11.
No. 3 foundry, \$10.25 to \$10.50.
No. 4 foundry, \$10 to \$10.25.
Basic, \$10.50 to \$11.
Charcoal iron, \$23.50 to \$24.

Coal conditions show a little improvement, some of the mines working more days than last reported, although those mines that are closed down still remain inactive, while many of the miners have sought work elsewhere. Coal interests express the opinion that the conditions will improve steadily and that all mines will be working on full time within the next 60 days. The pipe market is still quiet; very little change since the last report. All of the plants are working, but not a full force by any means, and no heavy orders booked so far as can be ascertained. The first castings at the National Cast Iron Pipe Co. were made Friday, and within the next 30 days the big plant will be running to its capacity. The plant when actively at work will employ from 350 to 500 men. The plant is owned by local interests and was financed by local money only, and will melt 200 tons of pig-iron daily. The output will be graduated to meet market demands for the product. E. E. Linthicum, vice-president and general manager, will look after the operations, he being a practical operator of such plants. Much interest has been manifested in the plant on account of its being a strictly local nature. It is reported that there will in the future be located one, and possibly two, other pipe plants to manufacture pipe of various sizes, but just where these plants are to be located has not been made public.

Prices in pipe continue the same as last report—four-inch, \$22; six-inch and over, \$20, with \$1 per ton extra for gas pipe; fittings, 2½ cents per pound.

The old-material market is strengthening a little, although the increase is still very light. There has not been a heavy demand, with no advance in prices, which are as follows f. o. b. Birmingham:

Old iron axles (small), \$15 to \$15.50.
Old steel axles (light), \$15 to \$15.50.
Old iron rails, \$12.50 to \$13.50.
No. 1 railroad wrought, \$12 to \$12.50.
No. 2 railroad wrought, \$10 to \$10.50.
No. 1 country wrought, \$9.50 to \$10.
No. 2 machinery cast, \$10.50 to \$11.
No. 1 steel scrap, \$10.50 to \$11.
Tram car wheels, \$10.50 to \$11.
Standard car wheels, \$12 to \$12.50.
Light cast and stove plates, \$9 to \$9.50.

There is still a good demand for wrought-iron pipe, and the business is steady and good.

A new coal mine is to be opened shortly on the property of the Alabama Fuel & Iron Co. near Acmar, on the Helena seam of coal. Part of the machinery has arrived already, and while the new shaft is not to be so extensive in its output as Acmar, the tonnage will be a good addition to the quantity of coal placed on the market by Alabama. A small mine has also been opened in Walker county since the first of March.

The City of Naples, a British steamer, arrived in the port of Mobile on Wednesday to load with pig-iron and steel rails for Japan. The vessel is 435 feet long, and is 15 feet longer than any vessel that has ever entered that port. The City of Naples will also carry a cargo of cotton.

CENTRAL ELECTRIC PLANTS.

Growth of Municipal Light and Power Stations in This Country.

Preliminary figures of the forthcoming quinquennial report on the municipal central electric-light and power stations of the United States have been given out by Director of the Census Harris. They were prepared under the supervision of W. M. Steuart, chief statistician for manufactures. The statistics relate to the years ending December 31 for 1912 and 1907, and June 30 for 1902, and cover municipal electric plants only. Municipal stations are those operated under the ownership of municipalities or other local governments. They do not include electric plants that were idle or in course of construction.

As a rule, no cash income is derived by municipal stations for electrical energy used for lighting streets and public buildings, and in order that the income shown may approximate the total consumption and

with \$5,245,987 in 1902, or an increase of 222 per cent. The total number of persons employed numbered 7940 in 1912 as compared with 3417 in 1902, or an increase of 132 per cent. The total horse-power of the power plant was 559,328 in 1912, as compared with 160,028 in 1902, or an increase of 249 per cent., the horse-power of the water-wheels having increased from 11,218 in 1902 to 130,261 in 1912, or 1061 per cent. The output of stations in 1912 was 537,526,730 kilowatt hours as compared with 195,904,439 in 1902, or an increase of 174 per cent. The estimated number of arc lamps wired for service was 91,851 in 1912 as compared with 50,795 in 1902, or an increase of 81 per cent. All other varieties of lamps wired for service, however, numbered 7,057,849 in 1912 as compared with 1,577,451 in 1902, or an increase of 347 per cent. The horse-power capacity of the stationary motors served with electric current was 164,291 in 1912 as compared with 3324 in 1902, or an increase of 4843 per cent. There was an increase of 310 stations in 1912 as compared with 1907, accounted for as follows: New stations, 301; from commercial to municipal stations, 106; from municipal to commercial, 80, and 17 stations reported in 1907 that were out of business or not in operation in 1912. The figures are shown in detail in the accompanying table.



METHODIST EPISCOPAL HOSPITAL, ST. JOSEPH, MO.

To be erected for St. Joseph Deaconess Home and Hospital Association; 5 stories; 140x170 feet; fireproof; reinforced concrete and brick construction; simple exterior, with pillars in front; terra-cotta trimmings; stone basement; porches; sun parlor on roof; structure in shape of "H"; connecting wing to contain administrative offices, operating-rooms and toilets; cost \$250,000 to \$300,000; architects, Eckel & Aldrich, St. Joseph; contracts not awarded.

	1912.	1907.	1902.	Per ct. of increase, 1902-1912.
Number of stations.....	1,562	1,252	815	91.7
Income.....	\$23,218,989	\$14,011,969	\$6,965,105	233.4
Electric service (light, heat and power, including fire service).....	\$22,663,708	\$13,614,434	\$6,836,856	231.5
All other services.....	\$555,281	\$397,565	\$128,249	333.0
Total expenses, including salaries and wages.....	\$16,917,165	\$10,316,620	\$5,245,987	222.5
Total number of persons employed.....	7,940	5,566	3,417	132.4
Total horse-power.....	559,328	321,351	160,028	249.5
Are.....				
Steam and gas engines (including turbines):				
Number.....	2,307	1,732	1,078	114.0
Horse-power.....	429,067	289,500	147,975	190.0
Water-wheels:				
Number.....	209	153	82	328.0
Horse-power.....	130,261	30,347	11,215	1061.2
Auxiliary engines:				
Number.....	(1)	72	36
Horse-power.....	(1)	1,504	835
Kilowatt capacity of dynamos.....	368,677	209,016	113,380	225.2
Output of stations, kilowatt hours.....	537,526,730	289,462,788	195,904,439	174.4
Estimated number of lamps wired for service:				
Are.....				
All other varieties.....	91,851	\$82,940	50,795	80.8
Stationary motors served:				
Number.....	7,067,849	\$4,061,318	1,577,451	347.4
Horse-power capacity.....	21,895	4,507	1,962	1016.0
Not reported separately.	164,291	31,689	3,324	4842.6

¹Includes, for purposes of comparison, 595 arc and 28,579 incandescent lamps reported by the electric companies to light their own properties. Lamps used for such service were included in the total number reported in 1912.

sale of electric current by these stations the schedule required that the income for service of this character should be estimated on the basis of what would have been charged for similar service by commercial companies in nearby localities. The number of persons employed may fall short of the total number actually engaged in work in connection with the operation of the electric stations, because the services of employees for the electrical work often are not required for long or continued service, and they are reported with that branch of municipal work with which they are chiefly employed.

The figures as presented for the United States show substantial gains for the decade 1902-1912. The number of stations increased from 815 in 1902 to 1562 in 1912, or 92 per cent. The total income for 1912 amounted to \$23,218,989 as compared with \$6,965,105 in 1902, or an increase of 233 per cent. The total expenses for 1912 amounted to \$16,917,165 as compared

Texas Facts.

With every new annual issue the value of the Texas Almanac, published by the Galveston-Dallas News, increases. It is a handbook and guide to the industrial development of the State. There is not a financial, political, social, educational, climatological, agricultural or manufacturing fact of importance about Texas which is not presented in this standard publication and brought up to date. The 1914 edition contains, in addition to the regular features, special sections on manufacturing development, transportation by steam and electricity, ports, harbors, rivers and other waterways, geography, geology and topography, mineral resources, rainfall, reclamation of swamp and overflow lands, agricultural diversification and production of statistics of leading staples, horticultural, dairy and poultry raising, and detailed information about the 253 counties of the State, all of which are organized except six.

Creosoted Piles In Galveston Bay Bridge

By F. B. RIDGEWAY.*

In the year 1875 the Santa Fe Railway let a contract for a number of creosoted Southern yellow pine piles to be used in the construction of a trestle across Galveston Bay. No record of treatment as to the method of seasoning the piles has been preserved. It is known that the contract called for a light treatment, but the actual amount of oil injected, if it were known at the time, has not been recorded, though it was probably something between 8 and 12 pounds of oil per cubic foot of timber. A thorough examination of a number of these piles would indicate that none of them were as thoroughly penetrated or received as heavy a charge of oil as those subsequently treated and put in the bridge in 1895, and which will be discussed later.

The results obtained from these 1875 piles were sufficiently good to warrant the use of creosoted piling in the reconstruction of the trestle in 1895. Though it is a matter of record that in 1895 a great many of these piles were still good, none of them was used in the new construction, but they were not taken out, and all were left standing between the bents of the new structure.

In July, 1912, subsequent to the completion and opening of the Galveston Causeway, the Santa Fe began to dismantle the railroad trestle. Due to some rough weather on the bay, the operation of dismantling was interrupted from time to time and was not completed until about the middle of 1913. At this time the remains of the old 1875 piling were also taken out. Having been removed from service at the end of 20 years, these piles, by virtue of the fact that they were left standing in the water until the present, have served as a test for 38 years. On examination after removal it was found that the air sections of these piling were very light in color, and had almost entirely lost every outward appearance of ever having been creosoted. The heart of the stick of the air sections was in many cases very badly decayed, though the outer portions were sound. In other cases, even no more than 50 or 60 per cent. of the stick has been penetrated by the oil, the heart as well as the outside portions of the stick was sound. The difference in condition is due to the fact that in certain of the piles sufficient of the butt of the pile was cut off after driving to expose the untreated center of the stick, and in consequence decay has started. In other cases the piles had been driven sufficiently deep that it was unnecessary to cut farther from the end of the pile than the oil had penetrated, and in consequence no untreated wood was exposed and there was no decay. It is probably a very fortunate circumstance in regard to these old piling which were not thoroughly penetrated, that the bottom of the bay is comparatively soft, and little difficulty is experienced in driving the piling to the desired depth and making unnecessary the cutting off of any but very short sections after driving.

The water sections of the 1875 piles were, in the majority of cases, more or less attacked by the teredo and limnoria. In many cases this section of the pile was almost completely eaten away. In a few cases the water section was in a practically sound condition. The action of the piles is due to both teredo and limnoria, but where the piling is badly eaten away it is difficult to determine just what effect is due to each, as the limnoria largely destroys the trail of the teredo. It is only in recent years that any marked attack by limnoria has been noted in the waters of Galveston Bay. The greatest attack is just below the water line, but in many cases on these old piling the attack extends clear to the mud line. It seems to be the common belief that in waters where the limnoria works its action is more severe and more difficult to retard than that of the teredo. The writer does not possess sufficient data to either confirm or deny the above belief, but it must be borne in mind that after a stick of timber has been honeycombed by the teredo and the wood structure almost completely torn down, it takes but little effort on the part of the limnoria to finish the job and get the credit for the whole thing. The writer noted a number of instances where this appeared to be the case, and a close examination of a great many piles revealed the fact that the teredo had progressed farther into the stick than the limnoria.

All piling under consideration in this report being of short length, from 18 to 26 feet, the percentage of the oil entering the stick through the end is very large and the analyses which are made on sections of stick which were taken a considerable distance from the end would show approximately about 70 per cent. of the actual treatment received by the entire stick.

Concerning the origin of the oil with which this old piling was treated little is known, except that it was an American oil and was at that time known as "light oil," the term light having no reference to weight or color, but being used to designate a rather thin oil which would not solidify readily and used in contradistinction to the term "heavy" oil, which denoted an oil containing a large percentage of solid constituents (rich in naphthalene) that would be liquified only at a rather high temperature.

At the time these piling were treated, creosoting plants and chemists were utter strangers to each other, and no analyses of the oil were ever made, at least not on the part of the creosoting company. It is stated, however, that one crude test which was applied by the operator was to rub a little of the oil on the forearm, and if it burned sharply it was a good oil, the burning sensation probably being due to the presence of a considerable amount of "tar acids."

As previously stated, the success with the 1875 creosoted piles was such that in 1895, when the bridge was entirely rebuilt, it was decided to use creosoted piling. The trestle as built in 1895 was about two miles in length, and extended across Galveston Bay to Galveston Island.

The piling were gotten in in good condition, and none of them was shattered in driving. The number included 110 red cedar piles which were given a lighter injection of creosote oil. The remainder were strictly long-leaf yellow pine, creosoted according to contract, with 24 pounds of oil per cubic foot of wood. The piles would sink if allowed to fall in the water. This fact the piledriver learned from experience after he had lost several sticks of piling.

All of the piling were furnished by Ricker-Lee & Co. of Galveston, now the International Creosoting & Construction Co., being creosoted at its Galveston plant. This plant was subsequently moved to Beaumont, and is at present the Beaumont plant of the International Creosoting & Construction Co. The pine piling were treated in the green state, the majority of them coming direct from the stump. They were seasoned by steaming in accordance with the following program. Steaming was regulated entirely by pressure, with no attention given to temperatures. Only saturated steam was used in direct contact with the wood. Superheated steam was used in coils in bottom of retort during entire steaming and vacuum process. Total steaming process was of 36 hours' duration. The first 24 hours the steam pressure was maintained at 55 pounds, and for the remaining 12 hours was kept between 47 and 50 pounds. After steaming, a vacuum was maintained for four hours. After the vacuum process the retort was filled with oil and same forced into timber under pressure until the 24 pounds per cubic foot had been injected. The actual amount of injection was determined by the difference in gauge readings taken before and after each treatment. The above information with reference to the method of treatment is supplied by personal memoranda of Mr. R. L. Allardice, now general superintendent of the International Creosoting & Construction Co., and at that time the engineer in direct charge of treating operations for Ricker-Lee & Co. Unfortunately, the complete treating records were lost at the time of the Galveston storm. At the time this work was in progress Mr. Bisbee was chief engineer of the Santa Fe, but the work was more directly in charge of, partly, Mr. F. Merritt, now chief engineer of the Gulf, Colorado & Santa Fe Railway Co. and partly Mr. C. F. W. Felt, now chief engineer of the Atchison, Topeka & Santa Fe.

The piling were treated under a 10-year guarantee, it being agreed by the creosoting company to replace free of charge any pile found defective at the end of that time. Not a single pile had to be replaced.

At the time of the 1900 storm the steamer Roma was driven through the trestle, breaking off a number of the piling, a total of 270 piles, having to be replaced on account of the storm. This storm also so seriously dam-

aged the Southern Pacific and the G. H. & H. trestles that they were abandoned, and subsequent to this date all rail traffic into Galveston was over the Santa Fe trestle. It has on this account been necessary from time to time to drive additional piling for reinforcement. The 270 piles put in right after the storm, as well as the later ones, came from various sources, and are not considered in this report. The following compilation of figures will give some idea of the traffic to which this bridge has been subjected:

Year.	No. of cars.
1900 (October to December).....	83,572
1901.....	247,118
1902.....	245,422
1903.....	320,116
1904.....	293,454
1905.....	329,462
1906.....	349,942
1907.....	352,532
1908.....	392,808
1909.....	342,990
1910.....	353,427
1911.....	404,658
1912 (to May 25).....	148,600

Each engine moving over the bridge is figured as three cars.

Fortunately for the identification of the 1895 piling, they were, according to specification, sharpened to a four-inch square point, and the work was very carefully done. They were the only piling in the bridge sharpened in this manner, and the identification was easy and absolute.

The oil used in the treatment of the 1895 piles was what was then known as "heavy oil," not on account of high specific gravity, but because at ordinary temperatures it contained a large per cent. of constituents in the solid state. It was imported English oil brought over in barrels, and it is stated that often the barrels would be more than half full of solid matter which was very hard. No analyses were made by the consumer, and there is no record of any having been made by the manufacturer. To determine its character we must refer to the oil extracted from the mud sections of the piles. It is found to be a low boiling oil, very rich in solids, especially naphthalene. It contained about 60 per cent. of naphthalene and something over 12 per cent. of tar acids in the fractions distilling below 320 degrees C. The small amounts distilling below 205 degrees C. were solid, the fraction 205 degrees C. to 245 degrees C. was solid and the fraction 245 degrees C. to 270 degrees C. was semi-solid and contained naphthalene.

The "tar acids" below 320 degrees average 11.8 c. c. per 100 grams of oil. Figured to percentage by volume, this would be something over 12 per cent., which is even then less than the total actual "tar acid" content of the oil, as it does not include the "tar acids" present in the oil undistilled at 320 degrees C. Small quantities of sulphonation residue were found on application of the sulphonation test, though from its general character this oil must certainly have been a pure coal tar creosote. A slight variation in the character of the oil extracted from the cedar pile, which is evidenced by a smaller amount of residue even in the water section, is accounted for by the fact that the cedar piles were treated last, and near the end of the work some American oil was mixed in. The disappearance of oil from the upper tow sections, due to evaporation, is, in the case of pile No. 3, so slight as to be scarcely noticeable. In the case of pile No. 4, which is one showing small absorption, the maximum evaporation shown is by the air section and is approximately 25 or 30 per cent. It is to be expected that piles showing the least absorption and poorest penetration would show the maximum amount of evaporation, and that the location of the piles in the trestle, whether in the center or on the edge openly exposed to the sun, would also have an influence, but no record was kept of the location of the piles. A loss of "tar acids," which is most marked in the water sections, is noted in the case of both piles.

After the Galveston Causeway project was started it was decided that some reinforcements were needed for the trestle, and some untreated piling were put in.

In regards to piling that have been creosoted, it is noted that in a great many instances where the pile has been attacked the borers have entered the wood through knots, and it is further noted in regard to the 1895 piles that most of the attacked sticks are very resinous in character. It is a fact well understood by operators treating yellow pine that knots and resinous pieces of timber are very refractory; that it is very difficult to force oil into them, and that there is a great deal of variation in the amount of oil absorbed by the various pieces in the same cylinder load. From the examination

*From his report as head of the department of chemistry and tests of the International Creosoting & Construction Co.

of the 1895 piles and the analyses made, the writer believes that the sticks which show any considerable action by borers are, in nearly every case, sticks which have received less than an average amount of oil due to their refractory character. A number of the untreated piling were examined with a view to determining if, in this case also, the knots were the first point of attack. Knots seemed to be very scarce, but a few instances were found where the knots were less attacked than the softer wood surrounding them. This would lead to the belief that the cause of the attack on knotty and resinous pieces of creosoted material is due primarily to the absence of creosote oil in a sufficiently large quantity, and not to any particular fancy of the borers for this class of material. To secure the best results in marine work we believe that knotty and resinous piles should, as far as possible, be excluded by the specifications for the timber and the material given a full 24-pound treatment of creosote oil and as much more as can be injected. In a number of specifications for creosoted piling for marine work loblolly pine has been called for, on account of it being softer and more easily impregnated with the preservative than long-leaf, but it would seem that long-leaf, free from knots, is much more easily obtainable than is the loblolly, and we believe this question to be one of very great importance in marine work.

We do not consider that we have sufficient data or that sufficient data is obtainable from the piling in the bay bridge to justify a conclusion that one particular grade of oil is better than any other, even for the limited field of marine work; however, that fact remains that the 1895 piles, which have given excellent results, were treated with a high naphthalene oil, and this fact should be accepted for what it is worth. To summarize the result of the investigation, we find as follows:

Out of an unknown number of yellow pine piling creosoted in 1875, exact amount of injections (chiefly a light treatment) unknown and exact process of seasoning, also unknown, after 38 years in Galveston Bay, some few still in sound condition, but the majority very badly attacked by limnoria and teredo, and a great number almost completely eaten away from mud line to water line.

About 3000 creosoted yellow pine piling, strictly long-leaf, creosoted in 1895, with a low distilling creosote oil, containing approximately 60 per cent. of naphthalene and between 12 and 15 per cent. of "tar acids," an oil which would be excluded by practically all of the widely used present-day specifications in this country, seasoned by heavy steaming (probably by many considered excessive), injection of oil, 24 pounds per cubic foot of wood, have stood in Galveston Bay under heavy traffic for 18 years, and over 90 per cent. still good.

Pulp Woods for Paper.

The sheet which newspaper readers hold in their hand each day is made of wood. If one looks closely the little wood fibers can be seen, especially in the margins, where the printing does not obscure them. The larger part of the wood so used is ground up, while some of it is reduced by the action of chemicals. The chemical pulp has the longer fibers, and a certain proportion of it is added to the ground wood to give the finished paper the required toughness.

Spruce, abundant in the New England and Lake States and in Canada, has heretofore been the standard wood for making news print paper, and as long as there was a supply sufficient to meet the needs of the paper industry there was no reason to seek substitutes. But heavy inroads have been made on the spruce forests of the western part of the United States in this day of great circulations and large editions, especially of Sunday papers, with their many parts. On a rough estimate, a newspaper with an average circulation of 60,000 copies and an average edition of 20 pages uses each day the product of about four acres of forest. When this figure is multiplied by the great number of newspapers published in the United States, many of them with much larger editions, and when this is further multiplied by 365, because many papers are issued every day in the year, it can be seen that the drain upon the forests is enormous. Foresters say that even under the most approved methods known to their profession it could scarcely be expected that spruce would be able to hold its own, but would need supplementing by other material.

It is but natural, therefore, that paper manufacturers are looking for new sources of supply which will fur-

nish an abundance of wood pulp at a price which will not be prohibitive. Poplar and a few other woods are used, but they do not go very far.

In the national forests there are many woods considered inferior by lumbermen. Yet they are available for purchase at low rates, and many of the timber stands are readily accessible. The forest service, in its desire to utilize to the best advantage all of the resources of the Federal timber holdings, has been seeking proper uses for these trees and has experimented in making pulp from them at its pulp laboratory at Wausau, Wis., an auxiliary of the forest products laboratory at Madison. The Wausau laboratory is equipped with standard machinery, and all experiments are carried out under conditions which duplicate commercial practice.

As a final test of the value of some of these new woods under practical conditions, arrangements were made between the forest service and the Herald to print some part of its edition on paper made from various woods that showed promise as substitutes for spruce. These woods were ground at the Wausau laboratory; the product was then mixed with the usual proportion of chemical pulp and made into news print paper, rolls of which were sent to New York for the experimental run.

The new woods must fulfill many conditions as to color, finish and strength. In these trial runs most of the paper is made from various Western firs, which show considerable promise, but the investigators do not consider their tests complete until they have subjected the paper to actual printing conditions. They grow throughout the mountain ranges of the West, particularly in the Pacific Coast States.

In addition to their interest in finding new uses for little used woods, Federal forest officers naturally desire to keep the news print paper manufacturing industry within the United States. They therefore seek to present the opportunity offered by many of the woods on the national forests, where there is a supply of cheap wood available for many years to come.

Other woods have been tried for pulp by the forest products laboratory and other newspapers will make experimental runs of the paper. Anyone interested in this experiment, or in other wood-pulp tests carried on by the forest service, can secure exact information by writing to the forest products laboratory at Madison, Wisconsin.

The Need of the Country.

Referring to editorial correspondence in our issue of February 26 on the billions of dollars needed by railroads for betterments, Secretary Moses Folsom of the Board of Trade of Palatka, Fla., writes:

"A critical and certainly deplorable condition faces the country. I knew in a desultory way of the facts you have so succinctly set forth. I wish every intelligent man in America was in possession of the information contained in your editorial letter and felt his share of responsibility in trying to bring about the needed correction. * * * You present from time to time in the MANUFACTURERS RECORD the things in our public life in need of attention and do all the good you can to warn the country and avert trouble and disaster. Let us hope these warnings will multiply and ultimately bring about, if not the new millennium, at least more diffused prosperity and contentment."

Mississippi State Banks.

Between June 30, 1900, and December 27, 1913, the resources of State banks in Mississippi increased from \$19,245,841 to \$83,266,584, their capital from \$4,279,496 to \$11,992,510, the surplus from \$566,204 to \$3,046,046, their undivided profits from \$785,668 to \$2,302,954 and the individual deposits from \$11,506,075 to \$52,645,040. There were 326 State banks reporting on December 27, 1913, and 34 national banks reporting on January 13, 1914, the combined figures of the reports made within less than a month of each other showing aggregate resources \$61,981,803, capital \$15,477,510, surplus \$4,726,250 and undivided profits \$2,945,614.

The Board of Trade of Brunswick, Ga., J. G. Weatherly, secretary, is circulating a handsomely illustrated booklet telling of the advantages of the city and its surroundings. The board has begun the publication of "The Investors News."

Cheat River Coal Co.

Having incorporated with \$500,000 capital stock, the Cheat River Coal Co. of Albright, W. Va., has organized with officers as follows: A. R. Balcom, president; J. C. Markley, secretary; A. R. Balcom, manager and construction engineer. This corporation will mine coal and manufacture coke, intending to operate 100 bee-hive coke ovens. It will invest about \$70,000 for machinery, and plans to award the equipment contracts between April 1 and May 30.

To Manufacture Parquetry.

A plant equipped for a daily capacity of 20,000 feet of parquetry squares will be established at Winchester, Ky., by the Federal Parquetry Co. This company recently incorporated with \$100,000, and has its main offices at 175 Fifth avenue, New York, the officers being as follows: Lawrence Ottinger, president and treasurer; Mark Workman, vice-president; Ignatz Herz, secretary and manager. Both building and machinery contracts have been awarded.

Canneries for Ozark Belt.

William Nicholson, Kansas City, immigration and development agent of the Kansas City Southern Railroad, is understood to be interested in a plan for establishing a chain of canneries for fruit and vegetables in the Ozark Belt south and north of Fort Smith, Ark. It is stated that an investment of about \$1,000,000 is contemplated for building and equipping from 25 to 35 plants, most of these to be located in Polk and Sevier counties.

To Manufacture Woodenware.

The manufacture of wooden water pails, candy pails, lard tubs and other woodenware will be undertaken at Fayetteville, N. C., by the Cowell Woodenware Co. This company was recently incorporated with \$18,000 capital and the following officers: C. S. Russell, president; T. S. Tolar, vice-president; J. C. Cowell, secretary, treasurer and general manager. It has purchased site for the plant it will construct.

Big Timber Sale Reported.

It is reported that the recent sale of Livingston parish (Louisiana) timber land to the Lyon Cypress Lumber Co. of Garyville, La., involves a purchase price of between \$2,000,000 and \$3,000,000 for approximately 105,000 acres. The purchaser is said to be planning the comprehensive development of this property.

A \$500,000 Company Incorporated.

For the purpose of developing coal deposits and manufacturing coke near Palmer, W. Va., the Oil Lick Run Coal & Coke Co. has been incorporated with a capital stock of \$500,000. This new company's incorporators include Barton L. Hitt of Wilkes-Barre, Pa.; L. O. Knipp of Plymouth, Pa., and J. A. Ballanger of Mullica Hill, N. J.

R. L. Muse & Co. Sawmill.

R. L. Muse & Co., Walnut Ridge, Ark., will build a sawmill plant with a daily capacity of 40,000 feet of hardwood lumber. They have plans for a 150x50-foot building of mill construction, and have purchased practically all their mill machinery. This plant will cost about \$10,000. Marion Goode of Walnut Ridge is furnishing the plans.

For Manufacturing Wood Products.

The manufacture of wood products is proposed by the Southern Wood Products Co. of Portsmouth, Va., which has been incorporated with officers as follows: O. B. Lay, president, and C. F. Olm, secretary. This corporation is capitalized at \$60,000.

Japan harvested last year 251,149,665 bushels of rice.

SPEEDED BY RAILROAD CONSTRUCTION.

Individual Development in a Section of Eastern Kentucky.

[Special Correspondence Manufacturers Record.]

Whitesburg, Ky., March 13.

With the completion of the Lexington & Eastern branch of the Louisville & Nashville into the coal fields of Eastern Kentucky the magic wand of development began to spread all along the 100 miles of solid coal beds, and as a result new towns have sprung up "overnight," so to speak, and the old towns have taken on new life and vigor along all lines of manufacturing and commercial interests worthy of special note.

Though Whitesburg is not first in importance, her growth from a struggling little village of a few hundred has been phenomenal, having more than trebled in population within the past 12 months, and today Whitesburg boasts of good, solid, substantial business blocks, two thriving banks, splendid hotels, wholesale houses, a fine depot, a \$30,000 school building under construction, two first-class newspapers, a fine telephone system, with local and long distance connections; electric light and water systems soon to be established; considerable street improvement under way, and a number of good business blocks, residences, etc., under construction. Today Whitesburg wants a brick plant, a woodworking establishment, as the forests surrounding would make it an ideal site, coal-mining operations and other industries. Owing to the extensive building in the city and surrounding territory, a retail lumber yard would net splendid returns.

Whitesburg has a Commercial Club, organized less than a year ago, which has already done wonders for its upbuilding, and the town, situated in the heart of a great and inexhaustible coal field of the finest coking, steam and domestic coal, has a great future before it.

"Over-night" industrial cities that have grown up in the coal fields of this (Letcher) county since the building of railroads into the county are Jenkins and McRoberts, the former on the Sandy Valley & Elkhorn branch of the Baltimore & Ohio, the latter at the terminus of the Louisville & Nashville, seats of the Consolidation Coal Co.'s extensive coal-mining plants; Fleming and Hammond, new cities now being rapidly constructed by the Mineral Fuel Co. on Boone's Fork, along the Louisville & Nashville main line, and soon to be ready to ship an unusually large coal tonnage. Jenkins has a brick plant, machine shops, water-works, electric lights, lumber mills, planing mills, Y. M. C. A. central and four branches, a national bank, fine office buildings, and one of the most modernly equipped wholesale and retail stores in eastern Kentucky. The city has a number of industries besides coal mining. McRoberts, too, boasts of a city of varied industries, having every modern convenience—electric lights, water-works, telephone system, Y. M. C. A., a splendid banking institution, etc. Fleming also has organized a bank, to be opened within two weeks. Every convenience is being established, and the army of men employed there are rushing work with all possible haste. Already the Mineral Fuel Co. is shipping a large coal tonnage. It is beginning work on a third industrial city on Yount's Fork, four miles away, and the Louisville & Nashville is extending a branch line of road into it.

Neon and Blackey are new towns, the former near Fleming, the latter in the southern section of the county. It has extensive wholesale and retail stores, a number of big lumber mills and the Stuart Mission School, a splendid college lately opened, having been founded by Louisville people.

Hazard, the county-seat of Perry county, is in a fine coal and timber field, and has made rapid strides along all lines of growth and public improvements. From a neglected, obscure little village of less than 500 a year ago, Hazard has grown to nearly 3000 prosperous, thorough-going, wide-awake people, with the following coal companies in and around the little city: Hazard-Dean Coal Co., Kentucky Jewell Coal Co., North Fork Coal Co., Hazard Coal Co. and Ross-Petrey Coal Co., most all of which have started coal shipments, the others to follow soon.

There are a number of extensive lumber mills in close proximity, among them the Kentucky River Hardwood Lumber Co. and the Mowbray-Robinson Lumber Co., each employing several hundred men. Today the new Hazard is a city of good business blocks, schools and churches, good streets, fine water-works system, electric lights, telephone system (local) and the Cumberland Telephone & Telegraph Co.'s long distance lines.

Some of the best hotels in Eastern Kentucky, big wholesale and retail stores. Hazard is about midway between Jackson and McRoberts, is a rich agricultural, stock-raising section, besides her boundless coal and timber fields are destined to give results.

At least two extensive branch lines of railroad—branches of the Louisville & Nashville, are to be built immediately above Hazard—one up Line Fork and the other up Rockhouse, which, with two or three short branches, will materially aid the city's growth. At Masu, a new town 10 miles above Hazard, there are gigantic coal plants planned for the year, while the Mowbray-Robinson Lumber Co. has already started large lumber mills. Below here, near the Perry-Breathitt border, the Wolf Creek Coal Co. is beginning gigantic operations, and close by W. W. Tarbeal and party of Pennsylvania capitalists have established a \$50,000 wood-alcohol plant, which is now in full operation.

The people of Hazard are concentrating their efforts to make the town the first in importance along commercial and industrial lines in Eastern Kentucky, and they point with pride to the new industries that have located here within the past few months and the awakening that has taken place. Hazard has profited largely by the activity of its native citizens, but outside capitalists have done much to strengthen its business interests, many of the outside people investing largely in the vast wealth of coal and timber properties surrounding. The people of Hazard are hospitable, and invariably make it a point to impress the stranger that he is at home, among friends. Thus it is that the few outside people who have come here became impressed and have invested their money.

The whole of Perry county, too, is wide-awake and is rapidly coming to the front along all lines of public and civic improvement. Her schools and churches are as good as can be found in the whole of the Commonwealth, her schools often excelling those of the Blue-grass section of the State. A number of steel bridges are being built in different sections, while good roads—model highways—are forthcoming; coming by the bonding route, and an election will be called for some time early in April for voting the necessary bonds. There is little doubt that the bonding will carry with a whip. An estimate shows that the corporations will stand at least 80 per cent. of the expense necessary.

W. B. WEBB.

GROWTH OF THE SMALL TOWN.

Carthage Typical of Developments Generally in the South.

[Special Correspondence Manufacturers Record.]

Randolph & Cumberland Railroad.

Carthage, N. C., March 11.

It is an encouraging sign in Southern development that not only are the cities imbued with that spirit of progress which has resulted in such amazing growth throughout the South, but that the small towns are feeling its quickening power as well. They have noticed the progress made by their big brothers, and so in turn they are looking around to see if they themselves do not possess certain resources, advantageous conditions or favorable situations which, if properly exploited, would result in their sharing, in a measure, the prosperity that is now rapidly making our South the world's choicest region.

A typical example of this is Carthage, the county-seat of Moore county, in the southern-central portion of North Carolina. This town in the lower Piedmont is situated on a high commanding ridge, from which the famous resorts of Pinehurst and Southern Pines may be seen to the south. This ridge is the dividing line between that part of North Carolina, now familiarly known as the "sand hills," and the rich lands to the north. The "sand hills" have recently come into prominence, due to the fact that so many men of wealth have taken up very extensive tracts there and have gone into farming on such a magnificent scale.

Carthage was an old Southern town, dating back many years prior to the Revolution, and it slumbered along for over a century content with its activity, beauty and climate. Then when the cities of the State, in regard to which it is centrally located, grew in such a rapid and magnificent manner, it profited by the example set and began, in its necessarily smaller way, to follow suit.

Prior to this time the town could lay claim to but one distinction, namely, that it was the home of the Tyson-Jones Buggy Co., a concern known throughout the South

for the quality of its vehicles. Up until a few years ago but one railroad served the town, the Randolph & Cumberland, which runs from Cameron, on the Seaboard Air Line, west to Carthage, which is its headquarters, then north to the Norfolk Southern, and crossing that, on up to the Deep River region. Now a branch of the Norfolk Southern enters the town from Pinehurst. The town can lay claim to the following additions and improvements within a decade:

It is lighted with electricity generated from a local hydro-electric plant, and is looking to the harnessing of the Deep River for power. One of the most modern and complete water and sewerage systems has been installed.

A hosiery mill that has met with splendid success has been erected; a cotton gin, of such capacity that it will take care of many more bales than are produced in this vicinity, will be ready for the coming season; the Tyson-Jones company has built and is running such a well-equipped garage that cars are brought to it from distant points for overhauls and repairs; a new church was completed two months ago that possesses such architectural worth that its picture found space on the pages of the MANUFACTURERS RECORD; a modern linotype equipped printing and publishing house has supplanted the old one; a free public library has been inaugurated; one of the finest school buildings in the South has been finished and is now in use; extensive building has resulted in the erection of several very costly and imposing-looking residences, two modern office buildings and several stores, while the plans for the ensuing year promise even greater growth.

Of course, if one looks at this development of the last 10 years in comparison with that which has taken place in the cities, it is as nothing, but when it is considered that Carthage is in the center of the least developed region of North Carolina, has a population of a bare 1000, and is not on the line of any of the big railroads, it does seem that the town is entitled to some credit, and that it illustrates that the spirit of progress, which is such a dynamic factor in the South's upbuilding, is not confined to the great industrial centers alone. It is certain that there are but few Northern towns of the same size that can boast a greater gain in the last decade.

Carthage is just beginning to grow, and there are many opportunities awaiting the men that will aid in her development. Her railroad situation, now that the main line of the Norfolk Southern to Charlotte has been opened, thus placing the town equidistant between two main lines of big Southern systems, is rather advantageous. Among the many industries that can find a lucrative location in this section, the following are the most needed:

A woodworking plant to utilize the great amount of waste lumber that comes from the four planers on the railroad, and to manufacture locally the 60,000 or more crates that are used annually in this section for shipping dewberries to Northern markets.

A cannery would also prove an immense success, for thousands of quarts of these berries go to waste every year for lack of a plant to preserve them.

Carthage being near Pinehurst and Southern Pines, and having really a more choice situation, should be an excellent site for a tourist hotel to accommodate that class of resorters that come to this section for the climate, and do not care for the excitement and convention of the large wintering places.

A brick plant would have at its disposal very large deposits of good brick clay, and the location in regard to the cities using so much of this building material is central.

A cotton mill would have a splendid site near the town, an abundance of raw material, and a good class of labor on which to draw.

In short, there are many openings in this clear field, and all the elements are present to assure success for any industry, from a hosiery mill to a furniture factory.

J. R. McCONNELL,

Industrial Agent.

Building at Texas City.

The Board of Trade of Texas City, Tex., reports that not less than 200 new houses were built during 1913, constituting the greatest similar period of building activity this city ever experienced. The construction work represented an outlay of over \$200,000. The building activity continues unabated, and about 60 structures have gone up since the first of the year.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Further details of highway undertakings and bond issues mentioned below are given under the headings Construction Department and New Securities, published elsewhere in this issue.]

Bonds Voted.

Conroe, Tex.—Montgomery County District No. 1 issued \$100,000 road bonds.

Fulton, Miss.—Itawamba county issued \$65,000 road bonds.

Kaufman, Tex.—Forney Justice Precinct No. 2 voted \$225,000 bonds to construct roads.

Kingston, Tenn.—Roane County Pike Commissioners will issue \$110,000 road bonds.

Lancaster, S. C.—City will issue \$13,000 street bonds.

Nashville, Tenn.—City sold \$695,000 bonds for street improvements.

Parkersburg, W. Va.—Williams District of Wood county voted \$70,000 bonds for road construction.

Bonds to Be Voted.

Athens, Tenn.—City will vote on \$30,000 bonds to improve streets, etc.

Baton Rouge, La.—East Baton Rouge Parish Road District No. 2 will vote on \$186,000 bonds.

Denton, Tex.—Denton County Road District No. 3 votes April 25 on \$22,500 bonds for road construction.

Timpson, Tex.—City votes April 7 on \$10,000 bonds to construct cement sidewalks.

Plano, Tex.—Collins county votes April 11 on \$100,000 bonds for roads.

Contracts Awarded.

Baltimore, Md.—State awarded contract for 21 miles of road construction.

Corsicana, Tex.—City awarded \$52,000 paving contract.

Easton, Md.—Talbot county awarded contract for one mile of State-aid road, etc.; amount available \$20,000.

Independence, Mo.—Jackson county awarded \$11,600 contract for road improvements.

Knoxville, Tenn.—Knox county awarded \$7,000 contracts for road improvements.

Lafayette, La.—City awarded \$71,000 contract for 15 miles cement sidewalks.

Lake Charles, La.—City awarded \$17,000 paving contract.

Liberty, Tex.—Liberty county awarded \$100,000 contract to construct 20 miles of shell roads.

Louisville, Ky.—City awarded \$169,714 contracts for street work.

Mt. Sterling, Ky.—Montgomery county awarded \$13,700 contract for road construction.

Okemah, Okla.—Okfuskee county awarded contract to construct 25 miles of graveled dirt road.

Contracts to Be Awarded.

Alexandria, La.—Cotile Ward, Rapides parish, will construct seven miles of gravel road; \$30,000 available.

Baltimore, Md.—State invites bids until March 31 to construct five sections of State highway, amounting to 16.60 miles.

Booneville, Miss.—Supervisors' District No. 1 of Prentiss county receives bids until April 6 to improve about 3.5 miles of roads.

Canton, Miss.—Madison county invites bids until April 6 to permanently improve about 14.5 miles of roads in District No. 3.

Durham, N. C.—City receives bids until March 20 to grade three streets and construct concrete curb and gutter along same; about 8500 cubic yards excavation and 7500 linear feet curb and gutter.

Eustis, Fla.—City will construct paving, etc.; amount available \$30,000.

Forest, Miss.—Scott county receives bids until April 6 to improve about seven miles of road.

Greenville, S. C.—City receives bids until March 20 to lay about 3000 square yards concrete drive and 4000

linear feet combination cement curb and gutter in Springwood Cemetery.

Knob Lick, Ky.—G. A. Forrest of Glasgow, Ky., and others will construct graveled road; cost \$3500.

Oakland, Md.—Garrett county receives bids until April 20 to build about five miles of State-aid highway.

Paducah, Ky.—McCracken county will expend \$37,000 for road construction.

Vernon, Ala.—Lamar county receives bids until April 11 for road improvements; estimated cost \$6542.26.

Houston Paving Facts.

City Engineer E. E. Sands of Houston, Tex., states that during the next three weeks he will advertise about 150 blocks of paving, averaging about 700 yards to the block. The material will be standard brick, vertical fiber, 3x3½-inch wood block, asphaltic concrete, Uvalde asphalt, Trinidad asphalt and a little Portland cement concrete pavement. It is stated by Mr. Sands that the work will be pretty well divided up between these various materials. Including the proceeds of a bond sale and such additional sums as will be assessed to property-owners, something like \$2,000,000 will be spent in street paving in Houston in the immediate future. When completed, about 200 blocks of paving will have been put down. The new work is expected to be largely finished within eight months.

Harris county is also preparing for good roads construction with the proceeds of a million-dollar bond issue recently disposed of. At a recent meeting of the county commissioners the county engineers were ordered to prepare specifications for repairs of a number of roads and advertise for bids for new road construction. It is contemplated that something over 100 miles of new good roads will be constructed. They will be mainly of gravel and shell, with the roads approaching the city streets of some hard-surfacing material. It will probably take a year or more to complete all the improvements, which will, however, be undertaken as speedily as possible and pushed to completion.

The New Memphis Bridge.

The Union Bridge & Construction Co. of Kansas City, contractor for the substructure of the new big bridge over the Mississippi River at Memphis, which is being built by the Arkansas & Memphis Railway Bridge & Terminal Co., has its contract about 60 per cent. completed. The erection of the steel superstructure will begin this coming summer, the Pennsylvania Steel Co. having been awarded the contract, which will amount to about 16,000 tons. The Virginia Bridge & Iron Co., Roanoke, Va., has the contract for the Westfield viaduct approach, about 5000 tons. Ralph Modjeska of Chicago, consulting engineer, designed and is supervising the work for the bridge and terminal company.

The Virginia company will manufacture the steel at its North Memphis branch works, and the contract includes uprights, cross-ties, flooring, trestle-work, bracing, placing wood floors, etc. The construction of this bridge will require an approximate investment of \$3,000,000, while the approaches and yards will cost about \$2,000,000. The bridge structure proper will be 8400 feet long and the approaches on each side will total about 8400 feet. Work was begun last July.

The bridge will be owned and used by the Rock Island Lines, the St. Louis, Iron Mountain & Southern Railroad and the St. Louis Southwestern Railway. It will be ready for service in the fall of next year, 1915. The main span, which will be built by the Pennsylvania Steel Co., will be 790 feet long.

Coal Terminals for Charleston, S. C.

In connection with previous announcements of plans for coal terminals at Charleston, S. C., it is of interest to state that the Stonega (Va.) Coal & Coke Co. is planning to construct extensive coal-handling facilities at Charleston. D. B. Wentz of Philadelphia is president of this company, and is reported to have purchased 100 acres on the Cooper River as site for the proposed plant. The company is not ready to announce details of plans.

To handle 1,498,000 bales of cotton at Dallas in the 1912-13 season required \$92,000,000, of which Dallas banks furnished \$80,000,000.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

ORANGE & NORTHEASTERN.

It Will Open Up a New Region in Louisiana and Provide a Short Rail Line.

T. H. Mandell, chief engineer of the Calcasieu Construction Co., Lake Charles, La., which holds the contract for building and financing of the Orange & Northeastern Railroad, furnishes the following interesting description of the enterprise:

"This railroad will begin at Port Orange, on the Sabine River, at the head of the deep-water channel, now under construction by the United States Government, and on the boundary line of Louisiana and Texas, where there will be ocean connection. Thence it will extend northeastward to Natchitoches, on the Red River, about 125 miles, passing through Vinton, Starks, Merryville, Leesville and Provencal, and crossing the Kansas City Southern Railroad at Starks, and again at Leesville, the Southern Pacific at Vinton, the Santa Fe at Merryville and the Texas & Pacific near Provencal, connecting with the latter and the Louisiana & Northwestern at Natchitoches.

"The new road will tap a district heretofore inaccessible, 75 miles long and 25 miles wide, for the most part covered with virgin long-leaf yellow pine and other timber, giving a large tonnage of freight to the mills at Orange, Leesville and Merryville, and to other mills to be established along the line. The transportation of this tonnage is the primary object of the road's construction, but this is of no greater import than the greatly reduced distance over direct rail routes from Chicago and St. Louis to ship bottom. Of this ocean freight there will be a considerable amount of cotton, as well as lumber and other commodities. The line will also skirt and penetrate the immense oil and sulphur fields of Southwestern Louisiana, and will handle domestic traffic going between the Mississippi and the Rio Grande, through the Intercoastal Canal, which is now under construction by the Government, thus giving water routes to all points. The enterprise will be financed through Eastern connections of the Calcasieu Construction Co. of Lake Charles.

"The domicile of the Orange & Northeastern Railroad is at Natchitoches, and the persons interested in its promotion are chiefly prominent citizens of that place. Gen. J. Alphonse Prudhomme, capitalist and planter, is president; J. G. Gray, a producer of crude oil at Vinton, La., vice-president; S. H. Hill, cashier of the People's Bank, Natchitoches, treasurer; D. W. Breazeale, of the law firm of Breazeale & Breazeale, secretary; and the board of directors includes L. Caspari, president of the People's Bank; J. B. Tucker, a real estate operator; M. Aaron, merchant, and A. Kaffie, planter and hardware dealer. E. Kennedy is general manager.

"The offices of the Calcasieu Construction Co. are located in Lake Charles, La., and the officers are C. B. Richard, president; L. L. Moss, secretary, and T. H. Mandell, chief engineer, any of whom will answer inquiries about the plan."

GREAT BRIDGE AT NEW ORLEANS.

Outline of Plans for Projected Structure to Carry all Classes of Traffic.

Further information about the projected railroad bridge over the Mississippi River at New Orleans is presented in a report from there which says that Arthur McGuirk, "special bond attorney of the Board of Port Commissioners," will go before the Legislature of Louisiana at its approaching session and ask for legislation necessary to secure its construction. His plan is that financing shall be provided by the sale of \$6,000,000 of 5 per cent. 35-year bonds, the city and the State to guarantee the interest thereon during the period of construction. Once in operation, so Mr. McGuirk is reported saying, the bridge could easily earn interest on \$20,000,000.

It is further stated that preliminary plans have been prepared by the Phoenix Bridge Co., Philadelphia, and the length of the bridge proper would be 2280 feet, although from the beginning of the approaches to their

end would be six and one-half miles, this owing to the height of the structure (and other circumstances), which would be 105 feet above low water and 85 feet above high water. The total length of steel structure required would be a little more than two miles. The channel span would be 1066 feet long and each of the shore spans would be 607 feet long. The bridge towers would be 176 feet high. It would be of the cantilever type. At least three years would be required for construction.

Both steam and electric railway traffic would be carried over the bridge, which would also have carriage-ways and footwalks. It would be owned and operated by a joint commission from the Dock Board and the Public Belt Railroad of New Orleans. It is said that the total amount of interest which the city and State would have to guarantee would be \$1,700,000, and that this would be reimbursed from the tolls to be collected for use of the bridge.

It is further proposed that H. McL. Harding, 17 Battery place, New York, shall be consulting engineer in charge, and that Col. Elmer L. Corthell, who, it is stated, built the Eads bridge at St. Louis, the Illinois Central's bridge at Cairo and the Eads jetties at the South Pass of the Mississippi River, would be associated with the enterprise in an advisory capacity. His address is Great Barrington, Mass.

Mr. McGuirk is further quoted saying that financial houses which he consulted about floating the necessary bonds said that all they wanted was that the interest should be guaranteed during the period of construction.

Members of the Dock Board are reported saying that in their official capacities they have no connection with the proposed bridge, having their hands full at present with their cotton warehouse and river-front improvement plans.

New Equipment, Etc.

Illinois Central Railroad has ordered 50 Mikado type heavy locomotives from the Baldwin Locomotive Works, Philadelphia, besides 22 other freight locomotives from the American Locomotive Co., New York.

Southern Railway has ordered 13 heavy switching locomotives from the Lima Locomotive Corporation, Lima, O.

Carolina, Clinchfield & Ohio Railway is reported getting prices on 9 locomotives, of which 6 are Mallet type and 3 Pacific type.

Arkansas Lumber Co., Warren, Ark., has ordered a 10-wheel locomotive from the Baldwin Works.

Virginia & Southwestern Railway has recorded an equipment mortgage to the Guaranty Trust Co., New York, covering 2 Mikado locomotives, 1 10-wheel passenger locomotive and 650 double drop bottom gondola cars of 50 tons capacity. The engines are built by the American Locomotive Co. and the cars by the Pressed Steel Car Co., Pittsburgh. The amount of the mortgage is \$550,346.

St. Louis Southwestern Railway, says a report, has ordered 2000 cars from the American Car & Foundry Co., St. Louis.

Kanawha & Michigan Railway is reported in the market for 10 locomotives.

Atlantic Coast Line has ordered from the American Car & Foundry Co. 15 all-steel passenger train cars as follows: 6 passenger coaches, 70 feet long; 4 combination mail and baggage cars, 70 feet long, and 5 express cars 60 feet long. This supplements an order given to the Pullman Company, Chicago, several months ago, on which deliveries have begun.

Tennessee Copper Co., 11 Broadway, New York, says a report, will purchase 50 hopper cars.

Southern Railway has ordered 1200 box cars and 400 flat cars from the American Car & Foundry Co. and 500 box cars from the Mt. Vernon (Ill.) Car Co.

St. Louis Southwestern Railway has ordered 1500 box cars, 400 flat cars and 100 gondola cars, the American Car & Foundry Co. getting the contract.

United States Steel Corporation has just received two small rail orders, one for 6000 tons from the Terminal Railroad Association of St. Louis, and another for 5000 tons from the Kansas City Southern Railroad.

Atlanta & West Point Route has ordered 1000 tons of bridge steel from the Virginia Bridge & Iron Works, Roanoke, Va.

Nashville, Chattanooga & St. Louis Railway is reported in the market for 2 postal cars.

J. I. Buckwalter Lumber Co., Union, Miss., has ordered a 2-6-2 type locomotive from the Baldwin Works.

Birmingham, Ensley & Bessemer Electric Railway,

according to a report from Birmingham, will soon order 8 cars of the pay-as-you-enter type.

Sand Springs Railway, Tulsa, Okla., has received an electric locomotive from the Westinghouse Company, Pittsburgh.

Central of Georgia Railway has received from the builders 14 new steel passenger train cars thus: 4 regular passenger coaches, 4 combination passenger coaches, 3 express cars and 3 baggage and mail cars.

Western Maryland Railway has ordered 20 freight and 5 switching locomotives, the former from the American Locomotive Co. and the latter from the Baldwin Locomotive Works, the cost thereof being represented by notes for \$332,000 and \$74,940, respectively.

Gulf, Freeport & Northern.

[Special Correspondence Manufacturers Record.]

Freeport, Tex., March 16.

The Gulf, Freeport & Northern Railroad Co., chartered last June, which proposes to construct a line from Freeport to a point on the Southern Pacific system in Fort Bend county, has completed 16 miles of grade to date. Eleven miles of this are in Fort Bend county between Damon and Fairchild and beyond; the remaining five miles are in Brazoria county between Columbia and Damon, and the construction gang is headed to tap the Southern Pacific system on the north. The exact terminus at that end has not been made public, but it will be one of three towns—Beasley, Rosenberg or Richmond.

This new railroad has secured all of its right of way between the Southern Pacific lines and Columbia, but has not as yet obtained it south of Columbia to Freeport, its proposed deep-water terminus, where the general offices are located. The company is doing its own construction with a traction engine and two graders. This was started December 1, but was greatly delayed by the recent Colorado and Brazos River floods. No rail has been laid as yet, but the outlook for the road's completion in 1914 is bright.

The route proposed is along the west bank of the Brazos from its mouth, and it is approximately 60 miles long. It will traverse a rich and productive country badly in need of additional transportation facilities north and south. C. Davis of Damon is president, and C. L. Sharp, Marshall, Tex., vice-president and general manager.

Close Inspection of Every Rail.

Details of the methods by which every rail in the Southern Railway's 7036 miles of track is annually subjected to the closest inspection are given in the March issue of the *Southern News Bulletin* in an article telling of the steps which the company has taken to prevent derailments resulting from broken rails.

This system of inspection, which was adopted over two years ago, is believed to be the most rigid and effective possible. The work is under the direction of the district engineers and division roadmasters, and is done by the track supervisors and section foremen, who closely scrutinize each and every rail while on their hands and knees and with eyes close enough to the rail to detect the slightest tendency toward weakness or failure, and wherever such is found the rail is immediately removed. Detailed reports are made on each rail left in the track so that comparison can be made at the next year's inspection.

The management of the Southern Railway feels that this rigid inspection of every rail over which its traffic moves embodies every possible step toward the prevention of rail failures, a feature of railway operation to which the officials of leading American railways have been giving the closest study during the past few years.

Western Maryland's New Chief.

Carl R. Gray, the new president of the Western Maryland Railway, arrived in Baltimore March 11 as expected, and took charge of the road as its chief executive as well as chairman of its board of directors. He has made no announcement as to his plans for the property, but said that he would devote the first two weeks of his time as president to studying its conditions from every point of view, going over it in company with S. Ennes, whom he has chosen to be the general manager. Like Mr. Gray, Mr. Ennes comes from the Great North-

ern Railroad, of which he was a division superintendent.

There are several important questions which the new president will study immediately with relation to developing traffic for the line. First are the terminals at Baltimore; then there is the problem of double-tracking, and close behind follows the matter of reducing the grades over the Blue Ridge. But Mr. Gray would not discuss either of these subjects, reference to them being had only casually, yet it is considered evident that the directors, in choosing him to be the head of the road, giving him the first two places on its official roster, namely, chairman and president, will be ready to support his policy in the matter of construction plans which he may deem essential to the success of the Western Maryland.

Louisville & Nashville Earnings.

The Louisville & Nashville Railroad Co. reports that its gross earnings for the eight months of its fiscal year ended February 28 were \$40,999,306, an increase of \$1,057,594. The figures for February were gross earnings \$4,429,025, a decrease of \$368,794 as compared with the same month of last year. For the six months ended December 31 the operating revenues were \$31,500,409, an increase of \$1,061,004 as compared with the same months of 1912. The net revenue was \$8,622,421, an increase of but \$52,443. Net railway operating revenue was \$8,624,194, increase \$67,093; railway operating income after deducting tax accruals \$7,677,714, increase \$46,063; gross income \$9,145,491, increase \$1253; net income \$5,086,010, decrease \$309,575; income balance after appropriations \$4,937,209, decrease \$363,567.

Depot for a Summer Colony.

New depot facilities will be provided by the Southern Railway at Hillgirt, N. C., for the accommodation of a colony of business men of St. Petersburg, Fla., who have purchased a large tract of land near Hillgirt, which they have named "Mountain Home," and where they intend to establish summer homes for themselves and others. Bids are being solicited from contractors for the construction of a frame, tile roof, passenger station, which will have white and colored waiting-rooms, baggage-room, ticket office and covered platform. The landings will be cherted and a 350-foot spur side-track constructed. Work on the depot building will begin as soon as contract has been awarded and the necessary building material assembled. It will be pushed to completion as rapidly as possible.

Caldwell County & Southern.

The Caldwell County & Southern Railroad Co. proposes to build an electric interurban railway from Hamilton to Kingston, Mo., 10 miles, using the bed of an abandoned steam railroad which ceased operations a long time ago, and which has, it is reported, been purchased. It is also proposed to finally extend from Kingston to Excelsior Springs, Mo., which will make connection with the interurban railway from there to Kansas City. True D. Parr and C. A. Martin of Hamilton are interested in plans for an electric company which will furnish power for the road and also for lighting. Miller & Gilbert of Kansas City have the franchise.

Pennsylvania's Large Mortgage.

The stockholders of the Pennsylvania Railroad Co. at their recent annual meeting approved the plan of the directors to authorize the creation of a blanket mortgage upon the property, as previously described, bonds under it to be issued in such amounts and at such rates of interest as may appear to be most advisable at the time of each issue. It is conditioned that at no time shall the total amount of bonds issued under the mortgage be greater than the total amount of the capital stock outstanding. This would make the total possible at present about \$500,000,000, but as the company is authorized to issue a total of \$600,000,000 of stock, this may be increased.

Auto Trucks to Extend Service.

A bill has been introduced in the Maryland Legislature to incorporate the Worcester Transit Co. to operate

an auto-truck line between Snow Hill and Berlin, Md., both of which are in Worcester county. Ultimately the line will also operate to Ocean City. The company operates a boat line from Pocomoke to Snow Hill, and it is to extend the transportation service from this that the new move is proposed. Capital is \$10,000, which may be increased to \$20,000. Oliver D. Collins, E. S. Dashiell, John W. Staten, Francis M. Wilson and Edward J. Dashiell are the directors.

Second Track in Service.

New second main track on the Cincinnati, New Orleans & Texas Pacific Railway between Sherman and Dry Ridge, Ky., four miles, has just been put in service, completing a continuous double-track stretch of 24.8 miles from Erlanger, Ky. Vice-President T. C. Powell announces that work is progressing on the second track under construction from Dry Ridge to milepost 37, 5.4 miles, and that with the completion of this and other work the company will have 37 miles of continuous double track, beginning at Ludlow, Ky.

Richmond to Selma Double Track.

The Atlantic Coast Line has completed the construction of a second track from Richmond, Va., to Selma, N. C., 162 miles, there having been just finished the sections between Pleasant Hill and Emporia, Va., 12 miles, and between Stony Creek and Petersburg, 17 miles, this total of 29 miles finishing work between the first two points mentioned. The company recently let contract for construction of 63 miles more of second track, this being from Selma south to Parkton, N. C.

Philadelphia, Baltimore & Washington.

The Philadelphia, Baltimore & Washington Railroad Co., one of the important lines in the Pennsylvania system, reports for the year 1913 rail operating revenue \$21,164,340, net rail revenue \$3,553,904. In 1912 these figures were, respectively, \$20,280,042 and \$4,195,540. Gross income was \$4,420,642 and net income \$1,375,782, both of which displayed decreases. The total assets of the company were \$69,362,764. Last year they were \$65,015,398.

Chicago & Alton Bonds.

The Chicago & Alton Railway has been authorized by the Public Service Commission of Missouri to issue \$999,000 of bonds, of which it was stated by the company that \$125,000 would take care of equipment notes soon coming due, while the remainder would pay for improvements made to the railroad during October, November, December and January.

Seaboard to Fort Meade.

According to a report from Fort Meade, Fla., the Seaboard Air Line has completed its extension into that region as far as the Pembroke mines, three miles north, while the grading work has advanced as far as the city limits.

Railroad Notes.

The Western Maryland Railway Co. has let a contract to the Skinner Shipbuilding & Drydock Co. of Baltimore for the construction of a double-tracked car float for use in the harbor of Baltimore. It will be 158 feet long and will carry six cars.

An interlocking signal plant to cost about \$50,000 is to be built at Aulon, near Memphis, Tenn., by the Union Belt Line, the Louisville & Nashville, the Nashville, Chattanooga & St. Louis and the Illinois Central railroads.

The Seaboard Air Line announces the appointments of D. M. McKey to be locating engineer, vice H. S. Thomas, promoted, and of L. A. Murr to be assistant engineer at Portsmouth, Va., vice R. M. Coburn, transferred to the office of the chief engineer.

The North Carolina Forestry Association and the Appalachian Park Association will have a joint convention at Asheville April 8-9.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

Kershaw Cotton Mill.

The Kershaw (S. C.) Cotton Mill has begun manufacturing with an equipment of 10,000 spindles, 500 looms, etc., on the production of fine white goods. This \$200,000 company's organization and plans were previously detailed. Its plant may be briefly outlined as follows: 505x128-foot main mill building; 46x38-foot engine-room; 46x46-foot boiler-room; large cotton warehouse; 50,000-gallon water tank; 3,500,000-gallon reservoir of concrete construction; 1000-gallon-per-minute fire pump; automatic sprinkler system; fireproof doors; pickers, cards, etc., furnished by Saco-Lowell Company of Lowell, Mass.; spinning machinery furnished by Fales & Jenks Machine Co. of Pawtucket, R. I.

Hooven & Allison Rope Plant.

The Hooven & Allison Co., Xenia, O., has awarded contract for the construction of buildings for its Kansas City plant to manufacture rope from sisal and other Mexican fibers. About \$100,000 will be the cost of the mill structure, as follows: West wing, 231x133 feet, one story high, except at northwest corner, where it will be two stories; south wing, 284x88 feet, one story and basement; total length, 515 feet. Smith, Rea & Lovitt, Kansas City, are the architects. Buildings are to be completed by August and then the machinery will be installed requiring about 200 operatives.

Durham Hosiery Mills.

The Durham (N. C.) Hosiery Mills has awarded contract to the Fiske-Carter Construction Co., Greenville, S. C., to erect building for Mill No. 6, 150x100-foot storage warehouse and 15 operatives' dwellings costing from \$500 to \$1000 each at Durham. This new mill structure will be three stories high and 420 feet long by 106 feet wide, while the warehouse will be 150x100 feet, the cost of all the buildings being reported as about \$100,000. On the first floor of the mill the company will install a patented process for spinning waste cotton into hosiery yarns, and on the second and third floors will install 7000 spindles, with accompanying equipment.

Hawkinsville Cotton Mill.

C. P. Gentry, Greenville, S. C., and associates have purchased the cotton factory at Hawkinsville, Ga., and will incorporate the Hawkinsville Cotton Mill to operate the plant. This new company will have a capital of \$75,000, and Mr. Gentry will be president and general manager. It has purchased and will install 24 automatic looms, will overhaul the present machinery, etc. The plant has 3000 spindles, 144 looms, etc., for a weekly output of 7000 pounds or 28,000 yards of sheeting. It will employ 60 operatives.

To Add 4500 Spindles, Etc.

Enlargements and improvements are being planned by the Hannah Pickett Mills of Rockingham, N. C., outlined as follows: Erect mill building addition, add 4500 spindles and 100 40-inch looms, construct 10 or 12 operatives' cottages and substitute electric drive for present steam plant.

Clinchfield Cotton Mill.

Plans and specifications for the Clinchfield cotton mill at Marion, N. C., will be prepared by J. E. Sirrine,

Greenville, S. C., who has been engaged as architect in charge. The machinery has been contracted for, and includes 26,000 spindles, 600 looms, steam power plant, etc. This plant will be built by the Clinchfield Manufacturing Co., reported last week as organized. D. D. Little of Spartanburg, S. C., president-treasurer of the Marion Manufacturing Co., will be president and treasurer of the new company, each of these incorporations being capitalized at \$500,000.

The Cotton Movement.

In his report for March 13 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 194 days of the present season was 12,921,986 bales, an increase over the same period last year of 711,578 bales. The exports were 7,270,254 bales, an increase of 344,960 bales. The takings were, by Northern spinners, 2,038,333 bales, a decrease of 111,326 bales; by Southern spinners, 2,401,712 bales, an increase of 258,982 bales.

North State Knitting Co.

North State Knitting Co., Durham, N. C., previously incorporated with \$24,000 capital, has acquired the hosiery knitting mill established by W. J. Berry. It has organized with officers as follows: J. S. Carr, Jr., president; C. M. Carr, treasurer; W. J. Berry, manager and superintendent. Equipment includes 60 knitting machines, 10 loopers, etc., driven by electric power on the production of women's hosiery.

Charleston Hosiery Mills.

With an authorized capital of \$50,000, the Charleston Hosiery Mills will build a knitting plant at Charleston, Tenn., the necessary building to be a one-story brick structure. This company has organized with officers as follows: President, W. J. Eldredge; vice-president, T. B. Saulpaw; secretary-treasurer, J. E. Quisenberry.

Pasquotank Hosiery Co.

The Pasquotank Hosiery Co., Elizabeth City, N. C., has been incorporated with a capital stock of \$50,000 by T. V. Scott, M. G. Morrisett and D. van Horn.

Sterling Spinning Co.

The Sterling Spinning Co., Louisville, Ky., has been incorporated with a capital stock of \$25,000 by George Dunham, M. W. Brock and J. S. McElroy, Jr.

Textile Notes.

Jacob Spiro, Knoxville, Tenn., plans to establish a hosiery knitting mill.

American Hosiery Mills Co., Kernersville, N. C., plans changes and improvements.

E. E. Johnson, Jasper, Tenn., is interested in a plan to establish a hosiery knitting mill.

Catawba Woolen Mill, Newton, N. C., is reported as to install hosiery knitting machinery.

The Lexington (S. C.) Manufacturing Co. has increased capital stock from \$100,000 to \$400,000.

Norwood (N. C.) Manufacturing Co. is reported as to double its capacity. It now operates 15,336 spindles, etc., on yarn production.

Riverdale Cotton Mills, West Point, Ga., will expend about \$10,000 to enlarge clothroom, and contract will soon be awarded. Park A. Dallis Company, Atlanta, is the architect.

George M. Bowers, president of the People's Trust Co., and H. H. Rutherford, both of Martinsburg, W. Va., have purchased the Martinsburg Worsted & Cassimere Co.'s mill and are reported as organizing a \$100,000 company to operate the plant.

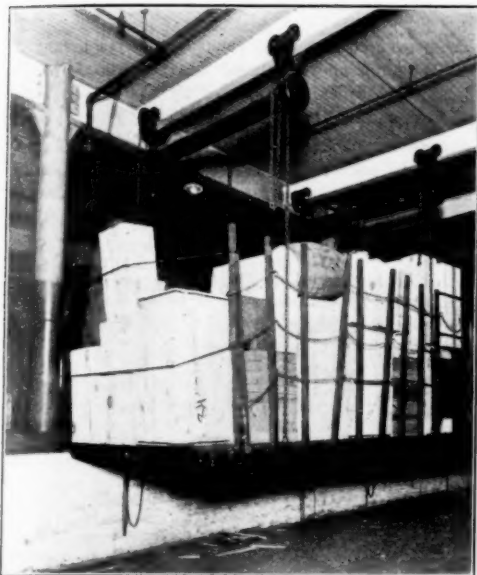
Miami, Fla., has spent during the past six months more than \$150,000 in municipal improvements.

MECHANICAL

Illustrations and descriptions having news value pertaining to developments in machinery, mechanical devices and inventions will be considered for use in this department.

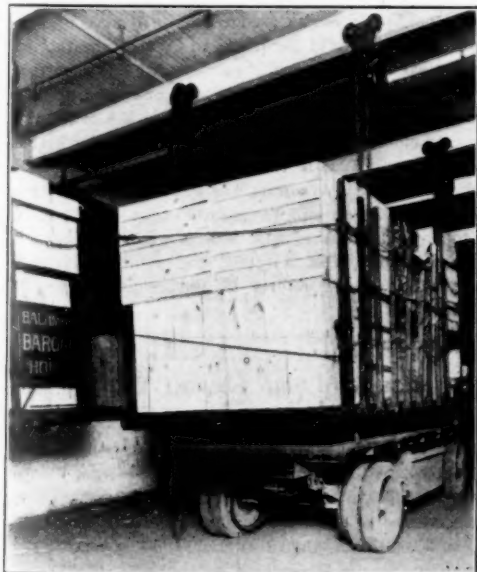
Its Motor Trucks Keep Pace With Great Developments of Baltimore Bargain House.

Prior to 1906 all of the great volume of business of the widely-known Baltimore Bargain House of Baltimore, Md., was handled by horse-drawn vehicles, but, realizing that the power vehicles were in course of time destined to perform the great bulk of the hauling throughout the country, Superintendent Neilson began



TRUCK BODY LEFT AT LOADING PLATFORM.

to experiment with the use of these vehicles and the equipment gradually grew from that period until at the present time 16 power wagons, of which 11 are five-ton machines, are operated. Of this fleet, 11 are five-ton electric trucks made by the General Vehicle Co., Long Island City, N. Y.; two are 3½-ton electrics, and one is a 2-ton electric made by the same company. A Ford



GENERAL VEHICLE ELECTRIC TRUCK RECEIVING LOADED BODY.

runabout is also used by the foreman of this fleet of trucks in keeping in touch with their work and holding them up to efficient results.

A study of the freight-handling proposition quickly demonstrated the fact that the power vehicles would be vastly more economical if they could be used a greater number of hours per day. That whereas it was only possible to work a horse a given number of hours, the power vehicle could be run almost continuously. And as the time in which freight could be shipped was limited

to the receiving hours of the railroads, it was necessary to haul a great number of loads per team per day.

The problem was solved by developing the device shown in the accompanying illustrations, by means of which removable bodies are suspended alongside their loading platforms and receive the load as shipments are ready without any delay to the motor vehicle, as the motor truck upon entering the building discharges its empty body and immediately passes under a full body, thus saving the time which was before necessary to put on a new load. This saving in time has reduced the hauling expense nearly 50 per cent., and has shown such great economy that they are now dispensing with a large number of their horse teams and will replace them with power vehicles, so that by January 1, 1915, they expect to have in operation about 25 power vehicles. Five additional five-ton General Vehicle electric trucks will be delivered under present orders.

This is only another illustration of the phenomenal growth of this house. It is now engaged in the erection of a mammoth warehouse in Southwest Baltimore, the area of which will be about 11 acres. The building will have 440,000 square feet of floor space and it is built entirely of reinforced concrete and containing every known mechanical device to reduce to a minimum the cost of handling merchandise. The delivery wagons will enter the center of the building where the loading mechanism as illustrated will pick up the bodies which will be readily moved to any position in the building; and being able to unload directly from the removable wagon bodies into the elevators the merchandise is quickly conveyed to the various departments. Railroad cars will likewise enter the building, and mechanical conveyors will transfer their contents to the various floors. Immense spiral shutters, 20 feet in diameter, will make it possible for all cases and packages to be shot down to their various destinations. This is the third large building erected by this progressive concern. Starting with only one building on Baltimore street in 1895, the adjoining buildings have been annexed until seven buildings are now occupied on Baltimore street. In 1903 they commenced the erection of a large building on West Fayette street, the property having a floor area of 135,000 square feet. This building was completed February 1, 1904, one week before the great fire which devastated Baltimore's business district. Fortunately for them, while the fire destroyed buildings up to their location, they were able to save their buildings, and the new building on Fayette street, just finished, saved them from any embarrassment.

In 1905 a plot of ground, with its buildings, in the aggregate about 150,000 square feet, was purchased in Southwest Baltimore and in the succeeding years as the growth of the business warranted several departments were moved to that location. In 1911 they purchased all property on the north side of Baltimore street between Liberty and Howard streets and erected on a portion of it adjoining the building they already occupied the new and handsome building so well known to visiting buyers from the South and Southwest.

This building contains 240,000 square feet of space, being 12 stories high, with 20,000 square feet to a floor, fireproof throughout. The new warehouse building now in course of construction in Southwest Baltimore is said to be the largest of its kind in the State.

The sales of the Baltimore Bargain House for 1912 were \$13,894,650, and for 1913 were \$16,456,715, an increase of \$2,562,065 in one year. The treatment of the motor-truck problem by this rapidly-developing concern may well be studied by industrial managers everywhere.

Big Installation of Exide Storage Batteries.

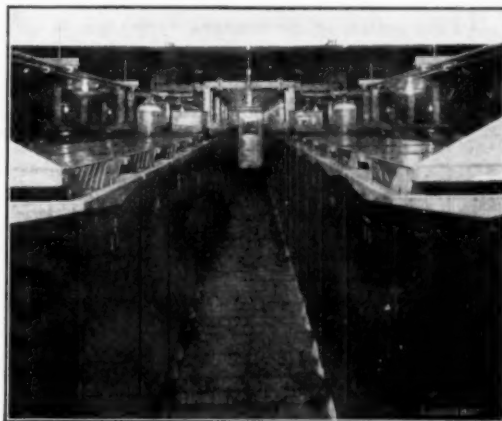
The Indianapolis Light & Heat Co. of Indianapolis, Ind., has recently completed the installation of an emergency storage battery consisting of 156 type H-61 "Exide" cells, manufactured by the Electric Storage Battery Co. of Philadelphia, Pa. The battery has a capacity of 4500 amperes for one hour, or 9300 amperes for 20 minutes. The interior of the battery-room is shown in the illustration.

This battery installation is modern in every respect, and the cells are mounted on the latest type of oil insulation. There are four remote control motor-driven end cell switches, two on each side of the system, each having a continuous capacity of 5000 amperes with an overload capacity sufficient to carry any output which the battery can give. The two switches on each side may be operated in parallel by interlocking their driving mechanism, in which case the two operating motors are

connected in parallel. Each motor has sufficient capacity to operate both switches if necessary. The switches travel from point to point at high speed, and it is possible to move the traveling brush from one end to the other, thus cutting in all of the cells of the battery in 15 seconds. The battery is equipped with the latest type of automatic pilot cell filling devices and recording and signaling hydrometers, one outfit on each side of the system.

The switchboard equipment for the control of the battery consists of eight panels of black oiled slate, occupying a total length of 10 feet 8 inches, with a height of 7 feet 6 inches. On this switchboard, in addition to the knife switches for connecting the end cell switches to the bus and the usual indicating instruments, there is installed for each end cell switch the Electric Storage Battery Co.'s recently developed indicating control switch. This switch is designed to control the operation of the end cell switches, and at the same time indicate this operation. It is possible by a single turn to set this control switch to indicate the point to which it is desired to adjust the corresponding end cell switch, and the latter will then travel to the desired point without further attention on the part of the operator. The setting of this control switch is accomplished by turning a small hand wheel, which brings to view behind an opening in the dial the number of the end cell to which it is desired that the end cell switch shall travel. While the end cell switch brush is in motion, as a result of this setting, the exposed number is illuminated by an intermittent colored light, the color being red if cells are being cut in and green if cells are being cut out. As soon as the cell switch arrives at the desired point it will stop automatically and the illumination becomes a steady white light.

This battery installation is installed at substation C,



EXIDE STORAGE BATTERIES FOR EMERGENCY USE.

which is equipped with one motor generator set for receiving alternating current and delivering direct current to the 240-volt bus. This motor generator set has a capacity of 1000 kilowatts. The motor is of the three-phase induction type. The neutral point of the battery is connected to the neutral of the system, but no other neutral is provided at this substation, the motor generator set being connected directly across the outside wires at 240 volts.

For charging the battery there is installed a three-unit booster set consisting of a synchronous motor driving two direct-current generators.

In addition to this battery the Indianapolis Light & Heat Co. has in service another battery consisting of 156 cells, type H-59 "Chloride Accumulator," which has been in service since January, 1901, or approximately 13 years. Its capacity is 9000 amperes on each side of the neutral for 18 minutes. The combined capacity of these two batteries is sufficient to carry the total peak load for approximately 18 minutes.

Indianapolis Cable Excavator Co.'s Equipment.

The simplicity and effectiveness in placing material from excavations at a point desired by means of the Negley patented cableway excavator are shown in the accompanying illustration. This equipment is manufactured by the Indianapolis Cable Excavator Co., Indianapolis, Ind., of which C. E. Negley is president and treasurer. As shown, the excavator travels on a slack cableway, and the dumping of the excavator at the point desired is effected automatically by means of the stop on the slack wire at the position of the storage pile.

The system consists of the excavating bucket on a

cable, the bucket being raised and lowered by means of fall blocks controlled by the tension line. The loading of the bucket is effected by the use of the load line cable. The load and tension lines are operated by a two-drum friction hoisting engine. Excavating by means of this system may be carried on economically within a point 1000 feet from the location of the mast. The area cov-

tered over the harbor and adjacent shores for a radius of several miles, while the major part of the hull was sent to the bottom in 33 feet of water. Pieces of steel three to five feet long were found two to three miles from the wreck.

In removing the obstruction to navigation the sections of the hull were lifted to a scow and towed to the

as the pieces of steel of suitable size for handling were cut out by the torch, they were loaded on wagons and then to freight cars for transportation to the mills, where the material was delivered at a considerable saving to the wrecking company through the metal dealer on account of its selling value, which would otherwise have been nil.



NEGLEY PATENTED CABLEWAY EXCAVATOR IN OPERATION.

ered amounts to practically a half-circle of that radius. The cable is either anchored at the outer end, or, where material runs shallow and it becomes necessary to shift quickly, the bridle system is used.

The loading device is so constructed that it will engage and hold the load until disengaged by the stop on the main cable. The load line is slack, the front of the carrier resting on crossbars until the operator has completed the loading and takes up the tension line, the carrier rising with the main cable. The hook at the bottom of the loader engages the front crossbar, holding the load until it reaches the place of unloading. The sides and bottom of the excavator bucket are in one piece, eliminating rough joints, and the back is also a single piece. The carrier stands vertically over the bucket in a rigid manner, insuring a durable working machine, adaptable to various uses.

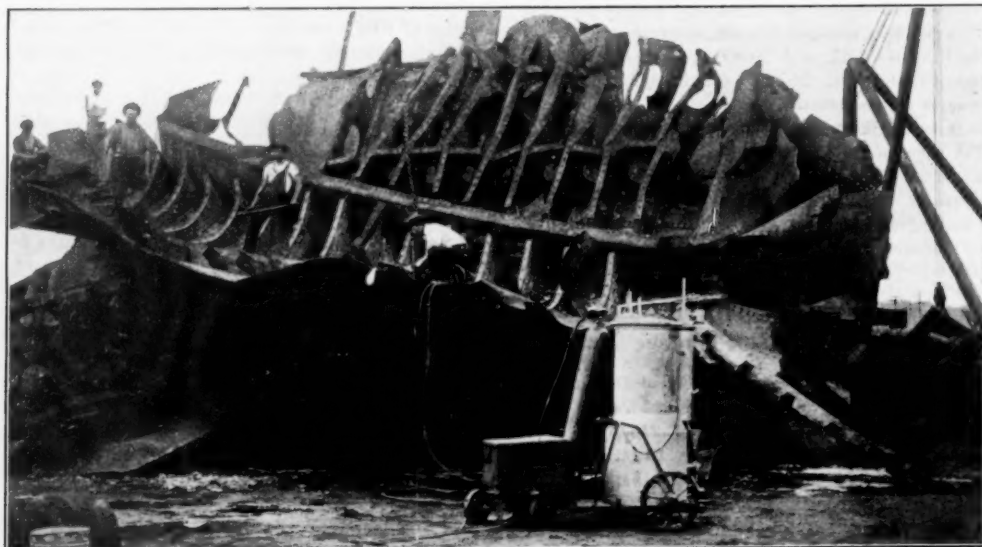
It is stated that the excavator will operate with 3½ feet of clearance at the place of dumping, thus increasing the storage capacity to the maximum. The mast used with this equipment should be tall enough to take up a fall of from 12 to 15 feet in each 100 feet. The system has a broad range of adaptability, as indicated by the widely-distributed points at which it is being used by contractors and others. The equipment is shipped ready to be mounted on track cable and to be secured to the load line.

Cutting Up a Wreck With Oxy-Acetylene Torch

The tangled wreckage of the 1800-ton steel freight steamer *Alum Chine*, which was destroyed by a dynamite explosion in the lower harbor of Baltimore, has recently been reduced to steel mill scrap by the aid of the oxy-acetylene cutting torch. This steamer was destroyed by an explosion of 300 tons of dynamite in its hold. The violence of the explosion was such that the entire forward part of the ship was blown away, the deck and upper works being reduced to bits and scat-

tered over the harbor and adjacent shores for a radius of several miles, while the major part of the hull was sent to the bottom in 33 feet of water. Pieces of steel three to five feet long were found two to three miles from the wreck. In removing the obstruction to navigation the sections of the hull were lifted to a scow and towed to the

accompanying illustration. Each piece was a shapeless mass, with the plates, beams and members bent and crumpled. Rivets could not be removed to advantage, since in many cases the flanges of angles or pieces of plate were bent over flat against them, preventing access to their heads. Most of the skin plate of the ship was five-eighths-inch steel, running to greater thicknesses in some portions along the bottom. The ribs and longitudinal frames were deep, built-up sections of plate and angles. The condition of the steel was such that the expense of ordinary hand cutting would have been prohibitive and the wreckage would have been a total



MILBURN OXY-ACETYLENE OUTFIT CUTTING UP WRECKED STEEL VESSEL.

ter had the oxy-acetylene process not been available. A Milburn oxy-acetylene plant mounted on a truck for portability was supplied by the Alexander Milburn Company of Baltimore. One torch operator was employed, long lines of gas hose being provided to allow him sufficient freedom of movement about the wreckage to attack it from points of greatest convenience. As fast

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"Evans" 4-5-Ton Tractor Truck.

The tractor truck manufactured by the Merchant & Evans Company, Philadelphia, Pa., shown in the accompanying illustration, presents a solution of the traction problem in the form of a two-wheel tractor on which the power equipment is installed and connection provided for the drawn truck.

The truck has a 6x12-foot steel body, 9-foot wheel base, and the tractor will turn the truck in a space of 9 feet in radius.

The power equipment is compact, and so arranged that the tractor may be turned through an angle of 90 degrees. The truck is supported by rear wheels with steel tires, and the front end is supported by the tractor.

The standard body or other type desired may be supplied, or the tractor alone may be provided and used to draw other forms of trucks, or any wagon may be drawn after removing the front wheels. Only 30 per cent. of the load is necessary on the front wheels to provide



"EVANS" TRACTOR TRUCK WITH STANDARD BODY.

traction hold. The tractor has been tested out thoroughly, and it is believed that it fills a demand for economical traction power equipment.

Zinc Spelter in 1913.

Of 1,103,359 tons of spelter produced in the world in 1913, the United States produced 346,676 tons, or 31.4 per cent. of the total, according to C. E. Siebenhal of the United States Geological Survey. Of this country's production, 337,252 was from native ores, and of that amount the production from Southern ores was 139,119 tons, or more than 41 per cent., the amounts by States being Missouri 129,018 tons, Oklahoma 6397 tons, Tennessee 2635 tons, Arkansas 478 tons, Texas 303 tons, Kentucky 172 tons and Virginia 116 tons. In 1913, of a total of 113,786 retorts, 45,496 were in Missouri, Oklahoma and West Virginia, the plant having the largest number of retorts in the country being in Oklahoma.

Houston's Ship Channel Traffic.

In 1913 the freight traffic handled on the Houston, Texas, Ship Channel aggregated 1,386,600 tons, valued at \$36,852,500. Cotton led with 96,000 tons, valued at \$22,040,000, with lumber and shingles second, 200,000 tons, valued at \$4,000,000; hardware and machinery third, 25,000 tons, valued at \$2,500,000; groceries and provisions fourth, 36,000 tons, valued at \$1,800,000, and rice fifth, 40,000 tons, valued at \$1,600,000. Other freight included 480,000 tons of sand, 325,000 of shell, 37,000 grain and feed, 18,000 brick and tiling, 14,000 oil and gasoline, 6000 beer and ice, 5000 fruit and vegetables, 5000 coal, 4800 fish and oysters, 3000 lime and cement, 2000 cordwood and 1000 tons miscellaneous. Over the docks at Houston were handled 793,750 tons, valued at \$8,889,000.

The Chamber of Commerce of Roanoke, Va., is circulating a folder presenting succinct facts about the advantages of the city and its surroundings.

Construction Department

IN ORDER TO FOLLOW UP

Properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be written on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will generally be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur, as our reports are often published before new companies are known and before they have any established office for the receipt of mail.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

DAILY BULLETIN

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year.

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BRIDGES, CULVERTS, VIADUCTS

Ala., Mobile.—City let contract at \$7600 to P. C. Powers & Son, Meridian, Miss., to construct reinforced concrete culvert on Wilkinson St. between St. Louis and Davis Aves., and for concrete bridge over Wilkinson St. at St. Anthony St. (Lately noted.)

Ga., Montezuma.—Macon county will construct steel or concrete bridge over Beaver Creek; bids until Mch. 25; F. J. Frederick, Chrmn., County Commrs., Oglethorpe, Ga. (See Machinery Wanted.)

Ga., Rome.—Floyd County Commrs. and city authorities are considering construction of bridges; Benj. C. Yancey, Mayor.

La., New Orleans.—Comms. of Public Finance opened bids for construction of Strauss trunnion bascule bridge over entrance to Southern Yacht Club pen; Midland Bridge Co., Kansas City, Mo., lowest bidder at \$28,976; Thomas L. Willis, Prin. Asst. City Engr. (Lately noted.)

La., New Orleans.—Arthur McGuirk, special bond attorney, Board of Port Commrs., submitted plan construct bridge (for steam and electric railway traffic, etc.) across Mississippi River; contemplates financing by issuing bonds for \$6,000,000, estimated cost of construction; proposes completion within 3 yrs. and public ownership; H. McF. Harding, 17 Battery Pl., New York, to be Consult. Engr., and E. L. Corthell, Great Barrington, Mass., to be Advisory Engr. Bridge plans include following: Total distance between railway connections, 6½ miles, including approaches; steel structure 2 1-10 mi. long; shore spans, 697 ft. each; total length main span, 2280 ft.; depth of foundation below river bed, 70 ft.; total height of structure, 450 ft. (Lately noted.)

Md., Annapolis.—Anne Arundel County Commrs. will probably let contract at \$7335 to Sanford & Brooks, Baltimore, to construct bridge over Stony Creek, and at \$2300 to Virginia Bridge & Iron Co., Roanoke, Va., for steel draw span of bridge. (Lately noted.)

Md., Baltimore.—Maryland State Roads Com., O. E. Weller, Chrmn., 601 Garrett Bldg., will construct reinforced concrete bridge in Prince George's county along Baltimore & Washington road over Anacostia River; bids until Mch. 31. (See Road and Street Work and Machinery Wanted.)

Md., Easton.—Talbot County Commrs. let contract to Holt Construction Co., Denton,

Md., to construct 90-ft. concrete bridge and 1 mi. road; previously noted. (See Road and Street Work and Machinery Wanted.)

Miss., Booneville.—Supvrs. Dist. No. 1 of Prentiss county, G. L. Holley, Secy., Highway Commrs., will construct bridges and culverts in connection with improvement of 3.5 mi. of road; Xavier A. Kramer, Engr., Magnolia. (See Road and Street Work.)

Miss., Brooklyn.—Forrest County Commrs., Hattiesburg, Miss., will construct bridge over Chalney Creek near Brooklyn; span 100x12 ft.; 152-ft. steel trestle approach; tubular steel piers; concrete abutments; let contract at \$2357 to M. C. Hasselle, 304 Chamberlain Ave., Chattanooga, Tenn. (Lately noted.)

Miss., Columbus.—Lowndes County Supvrs., Willis Banks, Prest., will construct 2 trestle bridges on Pickensville Rd., one of 360 ft. at Luxappallha Creek and one of 140 ft. at Seven-Mile Branch; bids until Apr. 6; optional bids on wood and steel structure; plans by Chas. Lyon Wood, Engr., Columbus. (See Machinery Wanted.)

Miss., Vicksburg.—Warren County Commrs. propose some bridge construction work in connection with \$300,000 bond issue previously noted under Road and Street Work.

N. C., Concord.—Buffalo Creek Drainage Board (E. C. Barnhardt and others) contemplate erecting 7 wooden bridges in connection with drainage canal. (See Drainage Systems.)

N. C., Winston-Salem.—Winston-Salem Southbound Ry. let contract to Virginia Bridge & Iron Co., Roanoke, Va., to construct steel bridge over Linden St. (Lately noted.)

Okla., Salina.—City and Salina township will vote Apr. 4 on bond issue to construct bridge across Grand River. Address The Mayor or Township Commrs.

S. C., Greenville.—City will construct two 40-ft. steel approach spans and remodel old span of Cleveland St. bridge, and erect 40 or 50-ft. span on Hudson St.; bids until Mch. 20; John B. Marshall, Mayor. (See Machinery Wanted.)

Tenn., Memphis.—Arkansas & Memphis Ry. Bridge & Terminal Co. progressing with construction bridge across Mississippi River; let contract Pennsylvania Steel Co., Philadelphia, Pa., for superstructure main river bridge, about 16,000 tons steel, and to Vir-

ginia Bridge & Iron Co., Roanoke, Va., West Field viaduct approach, about 5000 tons steel; Ralph Modjeski, Engr., Chicago, Ill., is designing and supervising work for terminal company; structure to be used by St. Louis, Iron Mountain & Southern Ry., St. Louis Southwestern Ry., and Chicago, Rock Island & Pacific Ry.; Union Bridge Construction Co. of Kansas City, contractor for substructure, has contract about 60 per cent. completed; begin steel erection during summer and complete in fall 1915. (Other details previously noted.)

Tex., Angleton.—Brazoria county, J. W. Munson, Judge, will construct steel draw-span highway bridge over Bastrop Bayou; bids until Mch. 21; plans and specifications at offices of County Judge or T. C. Tolman, Engr., Houston, Tex. (See Machinery Wanted.)

Tex., Bastrop.—Precinct No. 1 of Bastrop county is reported to vote on \$70,000 additional bridge and road bonds. Address County Commrs. (Lately noted as voting \$50,000 bonds.)

Tex., Cleburne.—Johnson and Bosque Commissioners let contract at \$30,970 to Austin Bros., Dallas, Tex., to construct steel bridge over Brazos River near Craven Springs; 700 ft. long.

Tex., Floresville.—Wilson County Commrs. let contract to Alamo Construction Co., San Antonio, Tex., to construct steel approaches for iron bridge across San Antonio River; bridge will be raised 5 ft. and refloored; cost \$239; Commrs. will construct iron bridge across Cibola; steel approaches and raised 3 ft. and refloored; cost \$3189; construct steel bridge across Floresville-San Antonio Rd.; cost \$374.

Tex., Galveston.—Galveston county will construct reinforced concrete bridge and culvert on 61st Rd.; bids until Mch. 23; John M. Murch, County Auditor. (See Machinery Wanted.)

Tex., Houston.—City, E. B. Bonney, Secy., will construct Franklin Ave. bridge; bids until Apr. 2; E. E. Sands, City Engr. (See Machinery Wanted.)

Tex., Luling.—Caldwell and Guadalupe counties will construct bridge over San Marcos River; steel; cost \$10,000; plans and specifications ready by Mch. 21; address Caldwell County Commrs. at Lockhart, Tex., and Guadalupe Commrs. at Seguin, Tex.

Tex., Mason.—John Brandenberger and associates contemplate constructing bridge over Llano River near Hedwig's Hill.

Tex., Waco.—City let contract at \$51,250 to Missouri Valley Bridge Co., Leavenworth, Kans., to rebuild suspension bridge across Brazos River.

CANNING AND PACKING PLANTS

Ark., Fort Smith.—William Nicholson, immigration and development agent of Kansas City Southern R. R., Kansas City, Mo., interested, with others, in plan to establish chain of fruit and vegetable canneries; 25 to 35 plants; about \$1,000,000 investment; locations in Polk and Sevier counties.

Ark., Fayetteville.—Fayetteville Canning Co., W. S. Carson, Prest., acquired established plant; daily capacity 30,000 cans. (Lately noted inceptd. with \$6500 capital stock.)

La., Breaux Bridge.—Breaux Bridge Oil Works reported to establish canning plant.

La., New Orleans.—Louisiana Canning Co. inceptd. with \$50,000 capital stock.

La., New Orleans.—Lone Star Pickle Co. (Jos. A. Zwart), San Antonio, Tex., will establish plant; leased building; has equipment. Address after Apr. 1, Religious and Felicity Sts., New Orleans. (Lately noted.)

Miss., Newton.—Newton Truck Growers' Assn., capital stock \$10,000, inceptd. by T. I. Doolittle, N. Doolittle, W. E. Sansing and others.

Va., Front Royal.—Old Virginia Orchard Co., A. H. Bell, Secy.-Treas., increased capital stock from \$10,000 to \$50,000; mfrs. preserves and jellies from fresh fruits; increase present capacity.

CLAYWORKING PLANTS

Fla., Tampa—Bricks.—T. W. Garbutt, Tifton, Ga., is reported to establish sand-lime brick and clay brick plant.

Mo., Fayette—Bricks.—Howard County Coal Co. will install brick plant near coal mine; cost \$25,000. (Company lately noted inceptd. to purchase and develop Russell mine.)

COAL MINES AND COKE OVENS

Ala., Birmingham.—Burnwell Coal Mining Co. increased capital stock from \$50,000 to \$100,000.

Ky., Viper.—Big Bend Coal Co., capital stock \$50,000, inceptd. by J. H. Justice, D. T. Rigby, C. H. Barrowman and B. F. Kaylor.

Okla., Dewar.—Dewar Coal Mines Co., capital stock \$25,000, inceptd. by M. M. Kiley, H. G. McKeever and W. T. Church.

Tex., Somerville.—A. H. Smith and others are reported to develop lignite coal deposits; will sink shaft to 3 strata of coal to depth of 28 to 150 ft.

Va., Richmond.—Chesterfield Land & Coal Corp., capital stock \$50,000, inceptd. by A. L. Adamson, Prest.; R. H. Harwood, Secy.

W. Va., Albright.—Cheat River Coal Co., capital stock \$500,000, inceptd. with A. R. Balcom Prest.; J. C. Markley, Secy.; A. R. Balcom, Mgr. and Constr. Engr.; operate 100 beehive coke ovens; electrically equipped; bids for machinery, to cost \$70,000, to be opened between Apr. 1 and May 30. (See Machinery Wanted.)

W. Va., Palmer.—Oil Lick Run Coal & Coke Co., capital stock \$500,000, inceptd. by J. A. Ballanger of Mullica Hill, N. J.; L. O. Knipp of Plymouth, Pa.; Burton L. Hitt of Wilkesbarre, Pa., and others.

COTTON COMPRESSES AND GINS

Mo., Clarkton.—Clarkton Gin Co., capital stock \$5000, inceptd. by Thomas Duncomb, E. S. Godsey and J. L. Terry.

Tex., Lufkin.—Lufkin Progressive League interested in establishment of cotton compress.

Tex., Sulphur Springs.—People's Cotton Oil Co. will erect 8-stand 70-saw gin plant; sheet metal; fireproof; metal seaghouse; cost \$15,000.

Tex., Waco.—Exporters & Traders' Warehouse & Compress Co. will rebuild plant lately noted burned at loss of \$100,000.

COTTONSEED-OIL MILLS

Ark., Argenta.—Rose City Cotton Oil Mill, Thomas O. Branch, Mgr., will rebuild burned mill.

Okla., Caddo.—Caddo Mehane Cottonseed Co. organized with Amos K. Bass, Prest.; F. P. Simple, V. P.; J. A. Moore, Secy.-Treas., and J. W. Crutchfield, Mgr.; will erect 4-stand cotton gin; building to cost \$10,000; open building proposals Sept. 1. (Lately noted inceptd. with \$20,000 capital stock.)

S. C., Charleston.—Sea Island Cotton Oil Co. increased capital stock from \$30,000 to \$60,000.

DRAINAGE SYSTEMS

La., Shreveport.—R. S. Gibson, Mgr. Boeuf River Levee & Lumber Co., Bosco, La., and others reported interested in reclaiming about 400,000 acres of land in La Fourche Basin Dist. in Ouachita, Morehead and Richland parishes.

Miss., Tunica.—McKinney Lake Drainage Dist. plans to reclaim 55,000 acres of land, of which 35,000 acres are cleared; require about 3,513,600 cu. yds. excavation; construction of about 88.4 mi. dredge ditches, varying in bottom width from 16 to 50 ft.; lateral ditches 14 ft. bottom width; L. W. Washburn, Ch. Engr., Tunica.

N. C., Bolton.—North Carolina Co., Frank W. Cornwall, V. P., First National Bank Bldg., Chicago, Ill., has not determined (by preliminary survey) area of first drainage district; definite information expected about Mch. 23. (Lately noted as interested in drainage of 200,000 acres of cut over and swamp land in Bolton Dist.)

N. C., Concord.—Buffalo Creek Drainage Board (E. C. Barnhardt, G. M. Lore and G. R. Boyd) contemplates draining 1375 acres of land, 100 acres being in city limits; canal 13.2 miles long, extending from Rowan line to Bradford's Mill; average depth 7 ft.; will erect 7 wooden bridges; estimated cost \$23,042.

N. C., Lincolnton.—Drainage Commrs. for Indian Creek Drainage Dist., John W. Hoover, Chrmn., reported to issue \$36,650 bonds for improvement to drainage district.

Okla., Claremore.—Rogers County Drainage Dist. has preliminary survey by Homer J. Wilkins, Surveying Engr., Muskogee, Okla., to reclaim more than 100,000 acres of land adjacent to Verdigris and Caney rivers; reported to cost about \$800,000.

Tenn., Dresden.—Sam Brown and others are interested in organization of drainage district to reclaim 20,000 acres of land in north fork of Obion River.

Tex., Port Arthur.—Precinct No. 4 of Jefferson county voted \$85,000 bonds to construct drainage system; C. H. Spurlock, Commr.

ELECTRIC PLANTS

Ala., Tuskegee Institute.—Tuskegee Normal and Industrial Institute, R. R. Taylor, Director of Industries, will construct central lighting and heating plant; power-house, 12x112 ft., including concrete coal bunker; following equipment required: Water-tube boilers, engines, generators, transformers, motors and electrical transmission system; bids until May 28 at office of Walter G. Franz, Consult. Engr., Union Trust Bldg., Cincinnati, O.; lately noted as probably to expend \$240,000 to install electrical system, water distribution system, etc. (See Machinery Wanted.)

Ark., Harrisburg.—Percy W. Winters contemplates improvements to plant.

Fla., Jacksonville.—Board of Bond Trustees, Frank Richardson, Chmn., will remodel substation for power plant, etc.; bids until Apr. 6; previously noted to install equipment. (See Water-works and Machinery Wanted.)

Ga., Chickamauga.—City has granted electric-light franchise. Address The Mayor.

Ga., Ft. Gaines.—Credille-Fowler Power & Mfg. Co., authorized capital \$25,000, inctd. by W. T. Credille, M. L. Fowler, Hamilton McRae and M. M. Smith; to establish plant for generating electricity for lighting and power; J. N. Ely, Consult. Engr., Atlanta, Ga.

Ga., Pelham.—City votes April 15 on \$400 bonds for extension to electric-light plant and water-works. Address The Mayor.

Ga., Sycamore.—City granted electric-light franchise to J. B. McCrary Co., Third National Bank Bldg., Atlanta, Ga.; electricity supplied by Ashburn (Ga.) plant.

Ga., St. George.—N. J. Norman will install electric-light plant; capacity 25 H. P.; cost \$2000; ordered machinery; lately noted. (See Machinery Wanted.)

Ky., Barlow.—Barlow Light & Power Co., capital stock \$2000, inctd. by J. W. Meshew, W. R. Crice and T. R. Johnson.

Ky., Oakdale.—City is prepared to grant franchise for electric-light plant for street and domestic lighting; bids May 1; J. A. Hagan, Mayor, 3839 Grand Blvd., Louisville, Ky. (See Machinery Wanted.)

La., Alexandria.—Alexandria Electric Street Ry. Co. will construct power plant at mill of Bayou Rapides Lumber Co.; boiler-room 40x18 ft.; engine-room 20x48 ft.

La., Alexandria.—Alexandria Electric Light & Water Works, J. C. Raxdale, Supt., has plans for enlargement and extension of power-house; will install additional machinery.

La., Eunice.—City will construct electric-light system; E. M. Kirsch, Consult. Engr., 518 Whitney-Central Bldg., New Orleans; bids until Apr. 16; Stanislaus Wyble, Mayor. (See Machinery Wanted.)

La., New Iberia.—City will extend electric-light system; \$4000 available for water-works, electric lights, etc. Address The Mayor.

Md., Baltimore.—Board of Awards let contract at \$583.48 to Eugene L. Rosenfeld Co., corner German and Howard Sts., Baltimore, for permanent illumination of City Hall dome; about 5000 lights.

Md., Baltimore.—Johns Hopkins University let contract to Charles L. Stockhausen, Marine Bank Bldg., Baltimore, to erect power-house at Homewood; 2 stories; 70x123 ft.; cost about \$50,000; plans by Parker, Thomas & Rice, 712 N. Howard St. (Lately noted.)

Md., Frederick.—City granted 50-year electric-light franchise to Frederick & Hagerstown Ry. Co.

Md., Princess Anne.—City will install street-lighting system; specifications require 65-80 C. P. lights to burn all night during year and every night, with privilege of town to install additional lights of same capacity at same rate per light per annum; J. Douglass Wallop, Commr.; bids until Apr. 3. (See Machinery Wanted.)

Mo., Hamilton.—True D. Parr and C. A. Martin will build electric-light plant.

Mo., Galt.—Galt Light & Power Co., capital stock \$10,000, inctd. by A. D. Miller, D. H. Clark and N. D. Jordan.

Mo., Liberty.—Missouri Gas & Electric Light Service Corp., St. Louis, applied to State Public Service Com. for permission to purchase Liberty Electric Light & Power Co.'s plant.

N. C., High Point.—City, F. N. Tate, Mayor, appointed committee to investigate purchasing arc-light system; cost about \$25,000.

N. C., Laurinburg.—City is reported to build electric-light plant. Address The Mayor.

N. C., Warsaw.—Duplin Power Co. will build electric-light plant to develop 125 H. P.; erect brick power-house 40x40 ft.; C. W. Petty, Engr., 848 North St., Greensboro, N. C.; city lately noted as letting contract to J. W. Petty of East Carolina Light & Power Co. to install electric-lighting system. (See Machinery Wanted.)

Okla., Quinton.—Quinton Ice, Light & Power Co., capital stock \$5000, inctd. by James Fogarty, Milo T. Crane and Mary E. Fogarty of McAlester.

Okla., Stratford.—City votes Apr. 7 on \$6000 bonds for electric-light system; Benham Engineering Co., Engr., Oklahoma City, Okla.

Tex., Beaumont.—Beaumont Electric Light & Power Co., main office, Boston, Mass., authorized Stone & Webster Engineering Corp., Trust Bldg., El Paso, Tex., to install 2000 K. W. turbine generator, 600 H. P. boiler and 500 K. W. street railway motor generator; improvements will more than double present capacity; cost about \$100,000.

Tex., El Paso.—El Paso Electric Co. will increase capital stock by \$1,000,000. (Lately noted to install 4000 K. W. turbo-generator, with condenser and switchboard; 2600 H. P. B. & W. boilers; work supervised by Stone & Webster Engineering Corp., Trust Bldg., El Paso.)

Tex., Emory.—Alexander Bros. will install electric-light plant.

Tex., Howard.—H. T. Howard will install electric-light plant.

Va., Clifton Forge.—Virginia Western Electric Co., A. C. Ford, Mgr., is reported to construct about 30 mi. of 44,000-volt transmission lines and several substations; will purchase six 44,000-volt transformers, from 15 K. W. to 200 K. W.

GAS AND OIL ENTERPRISES

La., Jennings.—Robinson Oil Co., capital stock \$50,000, inctd.; Henry A. Robinson, Prest.; F. B. Cutling, V.-P.; Lucinda C. Morrical, Secy.

La., Port Chalmette.—Oil Storage.—Independent Oil Co. will erect oil tanks.

La., Port Chalmette.—Oil Storage.—Liberty Oil Co., T. C. Anderson, Prest., will erect 6 oil tanks.

N. C., Raleigh.—Gas Plant.—Carolina Power & Light Co., H. H. Carr, Supt., has plans for gas plant; cost about \$100,000. (Lately noted.)

Okla., Ardmore.—Du Ard Oil Co., capital stock \$30,000, inctd. by Charles Von Weise of Ardmore, Forest H. Johnson and Frank Lewis of Durant, Okla.

Okla., Ardmore.—Fitz Oil Co., capital stock \$50,000, inctd. by D. C. Fitzgerald, P. C. Dings and Charles Von Weise.

Okla., Ardmore.—Maxine Oil Co., capital stock \$25,000, inctd. by W. W. Jefferson, Bentonville, Ark.; Jack H. Hays and F. B. McElroy.

Okla., Ardmore.—El Paso Oil Co., capital stock \$50,000, inctd. by B. M. Worsham of El Paso, Tex.; C. L. Anderson and Don Russell, both of Ardmore.

Okla., Ardmore.—Muldrow Oil & Gas Co., capital stock \$15,000, inctd. by G. Mullen, El C. Mullen and E. V. Dunlap.

Okla., Ardmore.—Val Oil & Gas Co., capital stock \$25,000, inctd. by L. V. Mullen, J. S. Mullen and E. Dunlap.

Okla., Ardmore.—Tango Oil Co., capital stock \$16,000, inctd. by Henry Flindeiss of Wichita, Kan.; P. A. Thurston of Ardmore, and John Wagner, Chandler, Okla.

Okla., Bartlesville.—Bartlesville Drilling & Producing Co., capital stock \$30,000, inctd. by T. B. Higgins, E. A. Higgins and A. E. Craner.

Okla., Bartlesville.—Sagamour Oil Co., capital stock \$50,000, inctd. by W. H. Johnson, L. A. Rowland and James Dalton, Jr.

PROPOSAL ADVERTISEMENTS

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FERTILIZER FACTORIES

Ga., Boston.—Boston Oil & Guano Co. is reported to rebuild fertilizer mixing plant, burned at loss of about \$12,000.

Va., Norfolk.—F. S. Royster Guano Co., Royster Bldg., is having plans prepared for reinforced-concrete mill building; 3 stories; 60x120 ft.; foundation plan. (See Machinery Wanted.)

FLOUR, FEED AND MEAL MILLS

Ky., Sharpsburg.—Sharpsburg Milling Co. organized by W. R. Knight and Stanley Smathers; purchased Sharpsburg Mills; in addition to milling, will deal in various products usually connected with milling enterprises, including feed, lime, cement, fertilizers, etc.

Okla., Tulsa.—Rea & Read Mill & Elevator Co., capital stock \$50,000, inctd. by E. R. Coker, O. A. Coker, both of Tulsa, Okla., and E. S. Rea, Coffeyville, Kans.

Tex., Vernon.—Kell Milling Co., Frank Kell, Prest., is installing 200 H. P. Deisel oil engine; let contract to Oscar Swinburn to erect 30x36-ft. fireproof engine-room; cost of engine and building, \$19,000. (Lately noted as to increase capacity of plant.)

FOUNDRY AND MACHINE PLANTS

Ga., Valdosta.—Southern Foundry Co., authorized capital \$25,000, inctd. by B. S. Richardson, D. A. Finley and C. T. Fox.

Tenn., Coster, P. O. Knoxville.—Steel Cars. Southern Ry., B. Herman, Chief Engr., Washington, D. C., plans to construct steel car shops for rebuilding and manufacturing steel cars; cost not determined; obtain funds from recently-announced proposed expenditure of \$10,000,000 for various betterments. (Memphis (Tenn.) and Birmingham (Ala.) improvements lately noted.)

Okla., Boswell.—Southern Petroleum Co., capital stock \$25,000, inctd. by James R. Armstrong of Boswell, B. W. Williams of Hugo, Okla., and M. Brown of San Antonio, Tex.

Okla., Claremore.—Waldron Co., capital stock \$10,000, inctd. by G. W. Templemayr, Kansas City, Mo., and G. W. Fry.

Okla., Claremore.—Verdigris River Oil & Gas Co., capital stock \$10,000, inctd. by P. W. Samuel of Muskogee, H. L. Hicks of Claremore and A. C. Enoch, Oklahoma City.

Okla., Enid.—Peacock Oil & Gas Co., capital stock \$30,000, inctd. by W. C. Pfaff, L. W. Cotton and C. Klein.

Okla., Guthrie.—H. U. B. Oil Co., capital stock \$20,000, inctd. by H. U. Bartlett of Sapulpa, Okla.; Robert Ogelsby of Tulsa, Okla.; D. H. Harrison of Wetumpka, Okla., and others.

Okla., Kingston.—Lon Oil & Gas Co., capital stock \$6000, inctd. by C. C. Chestnut, C. P. Hoggard and Ivey Johnson.

Okla., Muskogee.—Andy Oil Co., capital stock \$25,000, inctd. by G. W. Barnes, J. A. Gartian and E. B. Miller.

Okla., Muskogee.—Barnes & Cain Oil Co., capital stock \$25,000, inctd. by Geo. W. Barnes, John H. Cain and John L. Cain.

Okla., Muskogee.—Inola Oil Co., capital stock \$6000, inctd. by J. C. Denton, A. H. Murchison and D. H. Bynum.

Okla., Muskogee.—Nell-Rose Oil & Gas Co., capital stock \$10,000, inctd. by John W. Hoffman, Fred Ruark, both of Kansas City, Mo., and Geo. H. Lowerre, Jr., Muskogee.

Okla., Guthrie.—Kansas, Oklahoma & Texas Oil & Gas Co., capital stock \$15,000, inctd. by R. J. Conneway, R. D. Stewart and E. J. Oberholzer.

Okla., Hugo.—Webb Co., capital stock \$15,000, inctd. by C. L. Webb, A. L. Caviger and J. Neely Orme.

Okla., Kingston.—Four C Oil & Gas Co., capital stock \$5000, inctd. by C. C. Chestnut, C. B. Williams and Ivy Johnson.

Okla., Oklahoma City.—Banker's Guaranty Oil & Gas Co., capital stock \$100,000, inctd. by R. J. Bell, A. T. Wildman and E. R. Osborne.

Okla., Oklahoma City.—Little Bear Oil Co., capital stock \$14,000, inctd. by F. W. Fisher, Goldie Frost and Robert Burnes.

Okla., Oklahoma City.—Busse Oil & Gas Co., capital stock \$8000, inctd. by Frank Tuttle, D. J. Folson and H. Law.

Okla., Oklahoma City.—Solar Oil & Gas Co., capital stock \$5000, inctd. by F. G. Delaney, Harry H. Smith and W. P. Hiecock.

Okla., Oklahoma City.—East Klamichi Oil & Mineral Co., capital stock \$20,000, inctd. by August Anderson, E. L. Hillery and M. S. Weaver.

Okla., Oklahoma City.—Little Witt Oil Co., capital stock \$15,000, inctd. by D. M. Witt, J. S. Little and J. C. Miller.

Okla., Okmulgee.—Grannis Oil & Gas Co., capital stock \$50,000, inctd. by Ed. Vern, F. C. Dumont and R. H. Jeness.

Okla., Pauls Valley.—Lucky Strike Oil & Gas Co. (T. H. Vaughan and others) will develop 50-acre lease in Heaton field; let drilling contract about Apr. 1. (Lately noted inctd. with \$25,000 capital stock.)

Okla., Ponca City.—Mervine Drilling Co., capital stock \$5000, inctd. by E. W. Marland, I. P. Young, both of Ponca City, and Earl Smith, Newkirk, Okla.

Okla., Stillwater.—Bessie Meline Oil & Gas Co., capital stock \$15,000, inctd. by W. A. Thompson, B. A. Ray and M. C. Atchison.

Okla., Tahlequah.—Murchison Oil Co., capital stock \$6000, inctd. by H. M. Morris of Tahlequah, J. C. Denton and A. H. Murchison of Muskogee.

Okla., Tulsa.—Belvedere Oil & Gas Co., capital stock \$40,000, inctd. by A. Lewis, James R. Pratt and Hazel Shanks.

Okla., Tulsa.—Mangel Drilling Co., capital stock \$7000, inctd. by F. W. Mangel, E. E. Mangel and C. Joe Haskell.

Okla., Tulsa.—Metropolitan Petroleum Co., capital stock \$275,000, inctd. by C. G. Kiskaddon, Geo. E. Black and Claude H. Priddy.

Okla., Tulsa.—Morris-Acosta Oil Co., capital stock \$5000, inctd. by D. C. Acosta, J. W. Shell and Geo. F. Thomas.

Okla., Tulsa.—Imperial Petroleum Co., Ltd., capital stock \$250,000, inctd. by W. G. Guiss, M. L. McDowell and M. Dickerman.

Tex., Bono.—Marion Oil Co., capital stock \$200,000, inctd. by Jas. W. Atchison, Henry E. Stoy and Wm. W. Atchison.

Tex., Fort Worth.—Deep Creek Oil Co., capital stock \$9000, inctd. by H. Jordan, M. G. Roche and E. E. Merket.

Tex., Fort Worth.—Four Sands Oil Co., capital stock \$125,000, inctd. by R. C. Sander, John Scharbauer, Coke W. Harkrider and others.

Tex., Greenville.—Greenville Gas Co. increased capital stock from \$100,000 to \$150,000.

Tex., Waco.—Magnolia Petroleum Co., main office, Houston, Tex., purchased 8 lots at 26th and Franklin Sts.; will erect steel tanks and warehouses; cost about \$20,000.

Va., Parkersburg.—Palestine Oil Co., capital stock \$12,500, inctd. by N. P. Yadley, H. S. Gilbert, G. H. Harris and others.

West Virginia.—Ozard Oil & Gas Co., capital stock \$100,000, inctd. by Saml. R. Upham, J. C. Bartlett, W. B. Beecher and others, all of Pittsburgh, Pa.

ICE AND COLD-STORAGE PLANTS

Ark., Conway.—City Ice Co. will erect 12-ton-capacity plant.

Fla., Okeechobee.—Austin & Ricau, Jensen, Fla., are interested in establishment of ice plant.

Ga., St. George.—N. J. Norman will establish ice and refrigerating plant; building (62x62 ft., brick, cost \$3000) nearing completion; daily capacity 2 tons ice; machinery ordered; Ed. Gooden of St. George, Archt. and Engr.; lately noted. (See Machinery Wanted.)

Ky., Louisville.—Armour & Co., Chicago, Ill., will remodel cooling and storage rooms at Brook and Main Sts.; 4 stories; concrete; cost \$35,000; plans prepared.

N. C., Raleigh.—City let contract at \$3315 to United Refrigerating Machine Co., Kenosha, Wis., to erect refrigerating system for city market. (Lately noted.)

N. C., Newbern.—East Carolina Ice & Coal Co., authorized capital \$500,000, inctd. by Clyde Eby of Newbern, W. E. Swindell of Washington, N. C., and E. R. Conger of Edenton, N. C.

N. C., Shelby.—Shelby Ice & Fuel Co. will erect addition to plant, increasing daily capacity from 10 to 22 tons.

N. C., Southport.—Southport Light & Power Co. will add ice plant in connection with electric plant; same power for both plants.

Okla., Quinton.—Quinton Ice, Light & Power Co., capital stock \$5000, inceptd. by James Fogarty, Milo T. Crane and Mary E. Fogarty of McAlester, Okla.

IRRIGATION SYSTEMS

Tex., Dallas.—Clearfork-Brazos Irrigation Co., C. J. Thomas, Pres., P. O. Box 692, Dallas, has plans and surveys by Cooke & Harrison, Southwestern Life Bldg., for 10,000-acre irrigation canal in Jones county.

IRON AND STEEL PLANTS

Mo., St. Louis.—Rolling Mills.—St. Louis Screw Co., Clarence and Bulwer Aves., will build 2 iron rolling mills; roll various grades of bar iron, principally for own use in manufacturing bolts, nuts and kindred material; $\frac{1}{4}$ to $\frac{3}{4}$ in. diam., either round or square, and flats up to about 10 in. wide; also plans additions to screw works.

LAND DEVELOPMENTS

Ala., Mobile.—Home Farms Co., capital stock \$20,000, inceptd.; Harry H. Phillips, Pres.; Charles J. Horn, Secy.; Burrell J. Cramer, Treas.

Ark., Fort Smith.—Mazzard Land Co. increased capital stock from \$100,000 to \$200,000.

Ark., Little Rock.—Whelen Land Co., capital stock \$15,000, inceptd. with Moses Stern, Pres.

Fla., De Soto County.—Interstate Land Co., capital stock \$30,000, inceptd. by M. V. Beene, V. E. Kimmell, W. E. Wilkerson and others, all of Chattanooga, Tenn.; to develop 2500 acres for orange grove.

Fla., Jacksonville.—Palm Crest Realty Co., capital stock \$50,000, inceptd.; A. O. Dawson, Pres.; C. W. Bartleson, Jr., V.-P.; L. A. Carver, Secy.

Fla., Pensacola.—D. W. Wood, Brazil, Ind., and A. B. McCord purchased 600 acres land; will plant pecans, Satsuma oranges and grapefruit.

Fla., Tarpon Springs.—Pinellas Realty Co., capital stock \$15,000, inceptd.; James H. Murphy, Pres.; Ernest Meres, V.-P., and G. A. Loudon, Secy.

Ga., Atlanta.—Peters Land Co. will develop tract of land for residential section; let grading contract to Nichols Constructing Co.

Ky., Louisville.—Atlas Land Co., capital stock \$10,000, inceptd. by Richard Henchey, William Higgins and E. G. Parrish.

Ky., Louisville.—Ninaweb Land Co., capital stock \$5000, inceptd. by Louis, H. J. and Turner A. Summers.

Md., Baltimore.—R. Stanley Carswell, Pres. Standard Salt Co., 109 Hollingsworth St., purchased for development Eutaw (tract of 40 acres) on Harford Rd. north of Herding Run; preliminary work includes clearing and opening streets, after which drain pipe will be laid for sewers and storm water; also concrete work for sidewalk; develop suburban residence section.

Mo., Columbia.—Elmwood Cemetery Co. organized with J. A. Stewart, Pres., and H. H. Banks, Treas.; will develop 2 acres as cemetery; cost about \$10,000. (Lately noted inceptd. with \$10,000 capital stock.)

N. C., Charlotte.—Royal Land & Development Co., capital stock \$75,000, inceptd. by M. G. Hunter, Jas. P. Stowe, W. Myers Hunter and others.

N. C., Washington.—Washington-Beaufort Land Co., capital stock \$120,000, inceptd. by Norwood L. Simmons, Harry McMullen and S. J. Merriman, Jr.

Okla., Clinton.—Parkersburg Cemetery Association inceptd. by C. R. Strong, J. G. Barnes and Geo. A. Meacham.

S. C., Dorchester.—Albemarle Farms Development Co., T. T. Hyde, Jr., Pres., 502-503 People's Office Bldg., Charleston, S. C., will develop about 662 acres. (Lately noted inceptd. with \$20,000 capital stock.)

S. C., Spartanburg.—Gray Land & Improvement Co., capital stock \$5000, inceptd.; Lewis Gray, Pres.; Lucius Gray, V.-P.

Tenn., Knoxville.—Southern Orchard Co., capital stock \$50,000, inceptd. by J. W. Agey, Wallace Agey, Robt. U. Taylor and others; to develop fruit farms; owns land in South Carolina and will develop for fig, apple, peach and other fruit.

Tex., Beaumont.—Liveoak Land Co., capital stock \$10,000, inceptd. by L. C. Roberts, Robert Corley and R. H. Brogdon.

Tex., Houston.—University Land Co., capital stock \$68,000, inceptd. by C. B. Gillespie, M. E. Foster and Jeff N. Miller.

Tex., San Antonio.—Bowie Improvement Co., capital stock \$50,000, inceptd. by T. L. Conroy, W. J. Conroy and H. P. Rine.

Va., Damascus.—Virginia-North Carolina Land Co., capital stock \$15,000, inceptd.; F. H. Miller, Pres., Bristol, Va.; W. A. Minton, Secy., Damascus, Va.; develop 21 acres near center of town; grade streets and probably lay sidewalks; construction by company's force; expects to develop other property on Virginia Ry.

Va., Kenbridge.—Virso Development Co., capital stock \$10,000, inceptd.; Robert Blackwell, Pres., Danville, Va.; D. T. Kennedy, Secy., Kenbridge.

W. Va., Glendale.—Dowdell Realty Co., organized with R. L. Dowdell, Pres., and R. J. Catts, Secy.-Treas., will develop subdivision, pave sidewalks, etc.; cost about \$5000; contracts to be let locally; Koler & Konrad, Engrs., Wheeling. (Lately reported inceptd. with \$10,000 capital stock.)

LUMBER MANUFACTURING

Ala., Mobile.—Guard Box Lumber Co. will rebuild plant burned at loss of \$110,000.

Ala., Mobile.—River Tie Co., capital stock \$20,000, inceptd. by R. T. Gallagher and D. C. Gleason of Meridian, Miss.; P. J. Gallagher of Daphne, Ala., and John Morris of Mobile, Ala.; to make and buy oak ties on Tombigbee and Alabama rivers.

Ark., Little Rock.—Whelen Lumber Co., capital stock \$10,000, inceptd. with Z. D. Sparkman, Pres.

Ala., Mt. Vernon.—Winchester Lumber Co., Winchester, O., will erect hardwood lumber mill on Davis Lake.

Ala., Northport.—E. L. Brown, Dr. Hughes and Albert Holman organized company with \$25,000 capital stock to acquire Brown mills and timber property; will enlarge and improve planing mill.

Ark., Sherrill.—J. A. Reynolds will establish shingle mill on tract of cypress land.

Ark., St. Paul.—Mountain Creek Timber Co., capital stock \$400, inceptd. by L. P. Matthews, Charles Gilstrap and S. J. Campbell.

Ark., Walnut Ridge.—R. L. Muse & Co. have plans by Marion Goode, Walnut Ridge, for sawmill plant; 50x150 ft.; mill construction; cost of plant \$10,000; machinery mainly purchased; daily capacity 40,000 ft. hardwood lumber; lately noted. (See Machinery Wanted.)

Fla., Leesburg.—R. S. McCormick will establish lumber mill.

Ky., Elizabethtown.—Jenkins-Essex Co., capital stock \$35,000, inceptd. by Neff Jenkins, W. M. Essex and E. H. Massie.

Ky., Lexington.—S. F. McCormick Lumber Co., capital stock \$75,000, inceptd. by S. F. McCormick, G. A. McCormick and B. F. Perry.

Ky., Louisville.—J. P. Will Co., 1907 Portland Ave., will build planing mill to replace burned plant; plans by owner; mfr. principally frames, etc., used in building (Lately noted.)

Ky., Mayking.—Coeburn Lumber Co., Coeburn, Va., will install 2 lumber mills on Heuser Coal Co.'s timber tract on Pine Creek.

Ky., Mayking.—Valley Creek Lumber Co., Rochester, N. Y., will install stove mill.

La., Eunice.—Beal Lumber Co., capital stock \$10,000, inceptd.; W. L. Beal, Pres., MacLand, La.; L. O. Wade, V.-P.; H. C. Voorhes, Secy.; to acquire property Vordenbaumen Lumber Co.

La., Livingston Parish.—Lyon Cypress Lumber Co., Garyville, La., is reported to have purchased for development 105,000 acres timber land; reported purchase price between \$2,000,000 and \$3,000,000.

La., Winnsboro.—S. L. Brashear is reported interested in establishment of hardwood lumber mill.

Miss., Hattiesburg.—Hattiesburg Lumber Co., capital stock 24,000, inceptd. by G. W. Doster, D. E. Moore, R. I. Logan and others.

Mo., Albany.—Cousins Lumber Co., capital stock \$10,000, inceptd. by Claude H. Mary E. and Roy L. Cousins.

N. C., Black Mountain.—Back Mountain Lumber Co. increased capital stock from \$10,000 to \$25,000.

Tenn., Maryville.—G. M. Myers will construct planing mill.

Tenn., Nashville.—Alabama Red Cedar Co. will erect frame factory at 1st and Georgia Sts.; cost \$5000.

Tenn., Nashville.—Maury City Lumber Co., capital stock \$5000, inceptd. by J. W. McNatt, J. D. Reddick, C. H. Sharp and others.

Tex., Beaumont.—Beaumont Lumber Co. increased capital stock from \$30,000 to \$200,000.

Tex., Orange.—Miller-Link Lumber Co. increased capital stock from \$100,000 to \$500,000.

Va., Petersburg.—National Tie & Timber Co., capital stock \$50,000, inceptd.; W. H. Shack, Pres.; Grant Green, Secy.; both of City Point, Va.

W. Va., Parkersburg.—East End Lumber Co. organized with J. M. Senseman, Pres.; C. H. Holden, V.-P.; J. P. Senseman, Secy., and John J. Shore, Treas.-Mgr.; will erect building 45x60 ft., 2 stories, and another 35x60 ft., 1 story, 12 ft. high; cost \$1500; purchased machinery costing \$2000; small equipment for manufacturing frames; retail lumber, frames, sash and doors. (Lately noted inceptd. with \$15,000 capital stock.)

METAL-WORKING PLANTS

N. C., Winston-Salem.—Tin Shingles.—Twin City Metal Roofing & Supply Co. organized with T. A. Butner, Pres.-Mgr.; P. B. Butner, V.-P., and T. F. Holcomb, Secy.; will establish plant to mfr. tin shingles for roofing; purchased portion of machinery; lately noted inceptd. with \$10,000 capital stock. (See Machinery Wanted.)

MINING

Ark., Ruddels.—Lime.—Arkansas Lime Co. will enlarge plant; Dickinson & Watkins, Engrs., Little Rock, Ark.

Ark., Harrison.—Zinc.—T. E. McClure, Geo. Stretton, J. A. Galbraith and others will erect 150-ton zinc concentrating plant at Jack Pot mine.

Fla., Clearwater.—Fuller's Earth.—Chamber of Commerce is interested in developing tract containing deposits of fuller's earth.

La., Alexandria.—Gravel.—Tioga Gravel Co. let contract to W. E. Austin Machinery Co., 2 Spring St., Atlanta, Ga., to install washing and screening plant.

Va., Wilderness.—Gold.—Melville Gold Tract Mining Co. increased capital stock from \$100,000 to \$250,000; to install additional machinery.

MISCELLANEOUS CONSTRUCTION

Ala., Tuscaloosa.—Wharf.—City plans to construct wharf on Warrior River; engineers now investigating. Address The Mayor.

Ala., Tuskegee Institute.—Heating Plant, etc.—Tuskegee Normal & Industrial Institute, R. R. Taylor, director of industries, will construct central heating and lighting plant; bids until Mch. 28; Walter G. Franz, Consult. Engr., Union Trust Bldg., Cincinnati, O. (See Electric Plants and Machinery Wanted.)

Fla., Eustis.—Bulkhead, etc.—City will construct bulkhead, paving and sewerage system; amount available \$30,000; Isham Randolph Co., Engr., Atlanta, Ga. (Lately noted as voting bonds.)

Fla., Kissimmee.—Bulkhead.—City contemplates constructing bulkhead along entire lake front; contemplates constructing boulevard and parkway. Address The Mayor.

Ga., Augusta.—Levee.—City is reported to vote on \$750,000 levee bonds; Nisbet Wingfield, Chief Engr., River and Canal Com., 747 Broad St. (Previously noted.)

Ga., Savannah.—Wharves.—Harbor and Wharves Comm. invited City Engr. Conant to submit plans for erecting concrete wharves on recently acquired property; amount appropriated.

Ky., St. Helena.—Boiler-house.—Board of Public Safety, Ed. T. Tierney, Chrmn., receives bids until Mch. 26 to erect boiler-house for Home for Aged and Infirm; drawings and specifications at office John H. Thomas, Archt., 511 Keller Bldg.

La., New Orleans.—Wharf.—Board of Port Commissioners let contract at \$15,197 to Wm. Wren, New Orleans, to complete Pauline St. wharf. (Lately noted.)

La., Port Allen.—Levee.—Commrs. Atchafalaya Basin Levee Dist., V. M. LeFebvre, Pres., will construct sections Nos. 1 and 2 Port Barre South Levee in St. Landry and St. Martin parishes; contents 600,000 cu. yds.; bids received at office State Engrs., 213-215 New Orleans Court Bldg., New Orleans, until Apr. 8. (See Machinery Wanted.)

Md., Baltimore.—Dredging.—Board of Awards let contract to Maryland Dredging Co., 1512-1518 Fidelity Bldg., Baltimore, for one year's dredging from harbor; about 250,000 cu. yds. refuse; cost about \$40,000.

Mo., Carrollton.—Levee.—Brooks & Jacoby, Shubert Bldg., Kansas City, Mo., are engineers for construction of $\frac{3}{4}$ mi. levee, con-

taining 75,000 cu. yds., about 4 mi. south of Carrollton; cost \$14,400.

Mo., Kansas City.—Swimming Pool.—Park Board let contract at \$10,900 to Frederick H. Crites to construct swimming pool in Penn Valley Park; tiled sides; 3 to 8 ft. deep; 35x100 ft.; contract for plumbing at \$2500 let to Wm. Friel.

S. C., Charleston.—Coal Terminals.—Stonega Coal & Coke Co., Stonega, Va., is planning to construct extensive coal terminals on 100-acre site on Cooper River; D. B. Wentz, 1723 Land Title Bldg., Philadelphia, Pa., is Pres.; not ready to announce details.

S. C., Greenville.—Cemetery Entrance.—City will erect ornamental granite and limestone entrance at Springwood Cemetery; bids until Mch. 20; John B. Marshall, Mayor. (See Road and Street Work.)

Tenn., Memphis.—Interlocking.—Nashville, Chattanooga & St. Louis R. R., H. McDonald, Ch. Engr., Nashville, and several associates will construct interlocking system at Aulon crossing; cost \$50,000.

Tenn., Union City.—Dredging.—Southern Dredge Co., capital stock \$30,000, inceptd. by H. F. Forcum, C. C. Albright, P. B. Morris and others.

Tex., Austin.—Concrete Wall.—Travis County Commrs. Court will construct reinforced concrete wall across McGregor's ditch; bids opened Mch. 14.

Tex., Galveston.—Wharves.—Gulf, Colorado & Santa Fe Ry. Co., F. Merritt, Ch. Engr., Galveston, will not construct terminal wharves as lately reported.

Tex., Kaufman.—Levee.—Kaufman County Commrs. will construct levee on east bank of Trinity River in Kaufman county, distance of about 17 mi., to Porters' Bluff in Henderson county; cross-section levee at this point will connect with foothills; total length of levees about 19 mi.; O. W. Finley, Engr., Ennis, Tex. (Kaufman county lately noted to vote on \$86,000 bonds and Henderson county to vote on \$45,000 bonds.)

Va., Buckroe Beach.—Pier, etc.—Hampton Roads Traction Co., Hampton, Va., will construct recreation pier to replace burned structure, boathouse, etc.

MISCELLANEOUS ENTERPRISES

Ala., Gadsden.—Laundry.—Gadsden Steam Laundry will erect laundry on 5th St.; 40x115 ft.; 2 stories.

Ala., Mobile.—Grain Elevator.—Mobile & Ohio, B. A. Wood, Ch. Engr., Mobile, will expend about \$15,000 for improvements to grain elevator.

Ala., Mobile.—Steamships.—Chamelecon Steamship Co., capital stock \$50,000, inceptd.; Ashbel Hubbard, Pres.; to operate transportation line between Mobile and Central American ports.

Ark., Hamburg.—Publishing.—S. B. Baird will rebuild newspaper and job printing plant lately reported burned; erect building 20x75 ft.; fireproof; cost \$2000; open bids about May 1; purchased machinery costing \$2000.

D. C., Washington.—Publishing.—National Liberty Herald Publishing Co., capital \$50,000, inceptd. by Leroy Mark (Colorado Bldg.), Geo. P. Crandall and Louis W. Strayer.

Fla., Orlando.—Plumbing Specialties.—W. A. Slaughter is reported to manufacture plumbing specialties.

Fla., Pensacola.—Transportation.—Cessna Transportation Co., capital stock \$50,000, inceptd. by Charles E. Cessna, Oak Park, Ill.; Wm. E. Cessna and Albert B. Cessna, both of Santa Rosa, Fla.

Fla., Tampa.—Publishing.—Tampa Tribune is reported to erect building; about 5 stories.

Fla., West Palm Beach.—Publishing.—Tropical Sun Publishing Co., 403 Clematis Ave., will erect building; 25x120 ft.; iron; cost \$2000; install newspaper and printing plant to cost \$15,000.

Ga., Atlanta.—Publishing.—Southern Press inceptd. by B. F. Lipscomb and others.

Ga., Fitzgerald.—Building Materials.—Standard Supply Co. organized by J. A. Parrott, E. S. Bill and J. B. Wall.

Ky., Dawson.—Dawson Springs Bath Co., capital stock \$15,000, inceptd. by F. M. Fisher, H. G. O'Kain and G. E. Dalton.

Ky., Louisville.—Building Supplies.—Tyler Building Supply Co., capital stock \$10,000, inceptd. by I. H. Tyler, W. F. Lang and Isaac Bond.

Ky., Louisville.—National Cyclica Co. incorporated by B. F. Bates, J. R. Wright and L. S. Poston.

La., Breaux Bridge.—Syrup.—Breaux Bridge Oil Works reported to establish cane-syrup factory.

Md., Baltimore—Lithographers.—Young & Selden Co., 301 N. Calvert St., leased building at Saratoga and Calvert Sts. and will establish lithographing department.

Md., Baltimore—Laundry.—Elite Laundry (United Laundries Co.), Geo. A. Klinefelter, Pres., Fayette and Greene Ets., will erect laundry at Biddle and Eutaw Sts.; one structure 25x100 ft., 4 stories, and one 100x150 ft., 3 stories; steel and concrete; fireproof. (Previously noted.)

Mo., St. Louis—School Supplies.—Standard School Supply Co., capital stock \$8000, inceptd. by W. H. and Maude Smiley and James T. Ott.

N. C., Burlington—Laundry.—James Newlin will install laundry machinery and equipment in building on Main St.; Tom Hayes, Supt.

N. C., Concord—Implements.—Cabarrus Union Supply Co., capital stock \$2500, inceptd. by A. H. Litaker, R. D. Goodman, H. E. Clune and others.

Okla., Mulhall—Livestock.—I. M. L. Livestock Co., capital stock \$100,000, inceptd. by W. C. Wolfe, A. M. Wolfe and Wm. T. Dainnell.

Okla., Oklahoma City—Marble and Tile.—Taylor Marble & Tile Co., capital stock \$5000, inceptd. by W. G. Taylor, R. W. Spriggs and John H. Meyer.

S. C., Greenville—Crematory.—City let contract to Nye Odorless Garbage Crematory & Construction Co., Macon, Ga., to install garbage crematory; cost \$3500; C. P. Ballinger, City Engr.

Tenn., Knoxville—Laundry.—Model Laundry Co., capital stock \$10,000, inceptd. by James M. Dawson, Frank M. Houser, E. P. Loomis and others.

Tenn., Knoxville—Publishing.—B. I. Samsong, publisher of Knoxville Citizen, at Newport, Tenn., will establish plant; lease 2-story building on Union Ave. to be erected by B. H. Sprinkle.

Tenn., Memphis—Laundry.—Memphis Steam Laundry Co. increased capital stock from \$150,000 to \$200,000.

Tex., Belton—Publishing.—Belton Evening News, H. B. Savage, will remodel Carrick Bldg. on Central Ave. for publishing plant.

Tex., Dallas—Laundry.—New Method Laundry, capital stock \$6000, inceptd. by C. T. Murphy, T. H. Bridwell and J. Malpell.

Tex., Dallas—Printing.—Walraven Printing Co., capital stock \$2000, inceptd. by E. C. Walraven, C. N. Falld and J. T. Walraven.

Tex., Ennis—Printing.—Ennis Printing & Publishing Co. increased capital stock from \$8000 to \$20,000.

Tex., Fort Worth—Iron, etc.—South Texas Iron & Metal Co., capital stock \$3500, inceptd. by M. N. Cohen, Louis Okon and M. Simon; deal in metals.

Tex., Greenville—Advertising.—Greenville Poster Advertising Co. inceptd. by C. A. Duck, Dallas Harbert and A. A. Edwards.

Tex., Hillsboro—Publishing.—Dispatch Publishing Co., capital stock \$5000, inceptd. by J. P. Chambliss, W. B. Connelly and F. L. Vandenberg.

Tex., Marfa—Printing.—New Era Printing Co. will occupy building erected by Gus L. Maurer. (See Bank and Office.)

Va., Martinsville—Lucky Fairy Stone Co., capital stock \$25,000, inceptd.; T. H. Self, Pres.; M. E. Self, Secy.

Va., Moneta—Supplies.—Moneta Supply Co., capital stock \$10,000, inceptd.; S. L. Rucker, Pres.; J. E. Bond, Secy.

Va., Richmond—Publishing.—Presbyterian Committee of Publication let contract to John T. Wilson to erect building on west side of 6th St.; brick, concrete and steel; 5 stories; cost \$75,000.

Va., Richmond—Dairy.—Rennie Dairy Co. let contract Moore V. Harry to make repairs to building; cost \$12,000; Carnel & Johnston, Archts., Chamber of Commerce Bldg., Richmond.

W. Va., Huntington—Grain Elevator.—Gwinn Bros. & Co. have plans by C. S. Huston, Columbus, O., for grain elevator, office and warehouse at 2d Ave. and 10th St.; cost (without mechanical equipment) \$20,000; fireproof, including roof; steam heat; construction about May 1. (Lately noted.)

W. Va., Wheeling—Typewriters.—Wheeling Typewriter Inspection Co., capital stock \$10,000, inceptd. by Harry Young, H. G. Bills, Thos. B. McKen and others.

MISCELLANEOUS FACTORIES

Ala., Birmingham—Ice Cream.—Sutton Ice Cream Mfg. Co., capital stock \$13,700, incorporated; H. M. Beck, Pres.; L. A. Beck, V.-P.; W. C. Yarborough, Secy.

Ala., Birmingham.—Bohannon-Dugger-Enser Joint Co., capital stock \$30,000, inceptd.; Robert S. Bohannon, Pres.; J. V. Calvin, V.-P.; Neal Dugger, Secy.

Ala., Mobile—Syrup Evaporator.—Mobile Roofing & Cornice Co., 58 Water St., will operate evaporator plant in conjunction with present plant. (L. J. Cazalas of Mobile Roofing & Cornice Co. lately noted to establish plant.)

Ark., Blytheville.—F. M. Kuhn, Fayette, Mo., closed contract with J. W. Blader to erect brick factory building 25x75 ft.

Ark., Cotton Plant—Handles.—Cotton Plant Handle Co., capital stock \$5000, inceptd. by R. P. Sallee, J. T. White and Frank Doyle.

Ark., Fort Smith—Mausoleum.—Arkansas Mausoleum Co., Dr. G. C. Lott, Pres., St. Joe, Mo., will build concrete mausoleum. (See Little Rock.)

Ark., Little Rock—Mausoleum.—Arkansas Mausoleum Co., capital stock \$200,000, organized; Dr. G. C. Lott, Pres., St. Joe, Mo.; E. E. Overman, V.-P., Westboro, Mo.; S. Overman, Treas.; to construct concrete sepulchres at Little Rock, Fort Smith, Mena and Ozark.

Ark., Mena—Mausoleum.—Arkansas Mausoleum Co., Dr. G. C. Lott, Pres., St. Joe, Mo., will build concrete mausoleum. (See Little Rock.)

Ark., Ozark—Mausoleum.—Arkansas Mausoleum Co., Dr. G. C. Lott, Pres., St. Joe, Mo., will build concrete mausoleum. (See Little Rock.)

D. C., Washington—Dish Washers.—Whirlpool Dish Washer Co., capital \$250,000, inceptd. by P. C. Fiesler and R. T. Baker both of Washington, and W. C. Lamb of Tonopah, Nev.

Fla., Jacksonville—Syrup.—C. M. Lewis and others are reported interested in establishment of syrup refinery.

Fla., Orlando—Packing-house Equipment.—L. D. Jones, Gen. Mgr. Florida Citrus Exchange; A. R. Stevens of Tampa, Fla.; Seth Woodruff, Pres. Board of Trade, and others are interested in establishing plant to mfr. packing-house equipment, including washers, dryers, sizers, etc.

Ga., Atlanta—Dowman-Dozier Mfg. Co. let contract I. N. Brown, 406 Peters Bldg., Atlanta, to erect factory building; brick; cost \$12,500.

Ga., Augusta—Ice Cream.—Hill Ice Cream Co., L. N. Learned, Mgr., will erect \$40,000 plant; main office, Chattanooga, Tenn.

Ga., Douglas—Bottling.—Douglas Coca-Cola Bottling Co., capital stock \$3000, inceptd. by W. H. Bailey of Douglas, L. B. Harrell of Waycross, Ga., and J. W. Pass, Fitzgerald, Ga.

Ga., Waycross—Brooms.—J. B. Thomas & Bro. will install broom factory.

Ky., Louisville—Chemicals.—New Louisville Chemical Co. increased capital stock from \$1500 to \$25,000.

Ky., Louisville—Explosives.—United Safety Powder Co. organized; C. W. Shaffer, Pres., New York; Henning Chambers, Treas., Louisville; have plans for \$25,000 plant to manufacture explosives.

Ky., Louisville—Gloves.—Falls City Glove Co. inceptd. by B. Newburger, T. J. Overstreet and Wm. Newburger.

Ky., Midway—Distillery.—S. J. Greenbaum Co., capital stock \$500,000, inceptd.; M. H. Greenbaum, Pres., 126 W. Main St.; D. J. Lincoln, Secy., 2216 W. Chestnut St.

La., New Orleans—Ice Cream Cones.—National Cone Co. inceptd. with \$10,000 capital stock.

La., New Orleans—Alcohol.—New Orleans Industrial Alcohol Co., capital stock \$250,000, inceptd.; Joseph C. Eggart, Pres.; Sylvain A. Gratia, V.-P.; Alphonse Gratia, Secy.

La., New Orleans—Paint.—American Paint Works, G. A. Macdiarmid, Pres., will double capacity of plant; erect 5-story addition on Josephine St.; 40 ft. wide.

La., New Orleans—Perfumeries.—La Valiere Co., capital stock \$250,000, inceptd. by C. B. Dicks, Henry E. Chambers, Arthur B. LaCour and others; to continue manufacture of perfumes and toilet articles made by Finlay, Dicks & Co.

La., New Orleans—Coffee.—United Coffee Co., 315 Carondelet St., organized; J. A. Dayries, Pres.; C. W. Brown, Secy.; H. J. Ledoux, Treas.; will install machinery for roasting and packing coffee; bldg. opened Apr. 1; daily capacity, 6000 lbs. roasted and ground coffee; lately noted inceptd., \$150,000 capital. (See Machinery Wanted.)

La., Vinton—Wood Preservers.—Schauman Wood Preserver Co., capital stock \$50,000, inceptd. by J. W. Barnes, F. A. Schauman, Sidney Caruthers and others; to manufacture oils, acids, etc.

La., Winnfield—Creamery.—R. H. Fletcher is reported to erect creamery.

Md., Baltimore—Cigars.—Diamond Cigar Co. inceptd. by Max Diamond, Passaic, N. J., and others; establish plant to mfr. by machinery; daily output 750,000 cigars.

Md., Baltimore—Chemicals.—Clotworthy Chemical Co., capital stock \$30,000, inceptd. by J. Lee Selby, 500-508 E. Lombard St., Baltimore; Amherst B. Hall and Wm. G. Brodee, both of Arlington, Md.; leased building at 233-241 E. Hamburg St. for drug and flavoring extract factory.

Md., Baltimore—Hardware Specialties.—Dix Mfg. Co., 1021-25 Guilford Ave., purchased site 100x120 ft. at Eager and Concord Sts. and will erect 2-story plant.

Miss., Hattiesburg—Cotton Choppers.—Moore's Cotton Chopper Co., capital stock \$30,000, inceptd. by E. K. Moore, A. B. Eubanks and others.

Mo., St. Louis—Cigars.—Wm. Recker Cigar Co., capital stock \$40,000, inceptd. by Wm. Recker, Frederick Obergrenner and Minnie Recker.

Mo., St. Louis—Fire Extinguishers.—O'Norez's Fire Extinguisher Mfg. Co., capital stock \$100,000, inceptd. by Edward Schaffer, Oscar J. Holmas and Edward A. Bentley.

Mo., St. Louis—Electrical Machinery.—Wagner Electric Mfg. Co., 6400 Plymouth Ave., has plans for erection of plant; reinforced concrete; 4 stories; ground area 272x15 ft.; reported to cost \$150,000.

Mo., Webster Groves—Tires.—Bart S. Adams Tire Co., capital stock \$50,000, inceptd. by Bart S. Adams, W. T. Flynn, E. M. Dierker and others.

N. C., Charlotte—Bottling.—Chero-Cola Bottling Co., capital stock \$50,000, inceptd. by T. M. Nabors and G. S. Gerrard of Washington, Ga.; T. G. Greene and P. W. Walton, Jr., of Eatonton, Ga.; established plant at 512-514 W. 5th St.; will install additional machinery.

N. C., Greensboro—Paint.—Waynick Paint & Oil Co., capital stock \$50,000, inceptd. by J. M. Waynick, L. A. Wachter and C. M. Waynick.

N. C., Mt. Olive—Bottling.—Geo. H. Huttall of Wilmington, N. C., is reported to establish bottling plant.

N. C., Rocky Mount—Tobacco.—P. C. & A. E. Shore let contract D. J. Rose of Rocky Mount to erect tobacco prizer; 175x140 ft.; mill construction; cost \$20,000. (Lately noted.)

N. C., Rocky Mount—Tobacco.—Rocky Mount Insurance & Realty Co., T. H. Battle, Pres., let contract D. J. Rose of Rocky Mount to erect tobacco rehandling plant; mill construction; structure to be rented to tobacco companies. (Lately noted.)

N. C., Washington—Plumbing.—Gay Plumbing & Hardware Co., capital stock \$100,000, inceptd. by W. R. Gay, B. L. Susman and E. H. Harding.

S. C., Anderson—Chemicals.—Pyrene Co., capital stock \$20,000, inceptd. by M. M. Mattison, C. C. Dargan, A. L. Smethers and others to manufacture fire-extinguisher chemicals.

S. C., Anderson—Bottling.—Chero-Cola Bottling Co. (A. P. Spence) will establish bottling plant; daily capacity, 500 cases Chero-Cola; cost of machinery, \$10,000; will not erect building.

S. C., Charleston—Cigars.—E. H. Robertson Cigar Co., capital stock \$5000, inceptd. by E. H. Robertson, A. G. Holst and Paul M. Macmillan.

S. C., Chester—Bottling.—Chester Chero-Cola Bottling Co. (Dr. Geo. Johnson and Arthur Thompson) will install \$10,000 plant in Cogler Bldg. at Five Points.

S. C., Spartanburg—Cigars.—J. C. Hill, Sarasota, Fla., will install cigar factory in building corner W. Main and Wall Sts.

S. C., Sumter—Prizery.—A. H. Sellars of Columbia has contract to erect two prize-houses. (See Warehouses.)

Tenn., Franklin—Bottling.—W. L. Mitchell of Scottsville, Ky., purchased building and will equip for bottling plant; cost of machinery \$5000.

Tex., Dallas—Brewery.—Myer Beer Co., capital stock \$25,000, inceptd. by Ellis Brin, Herbert Brin and Abe Goldstein.

Tex., Victoria—Brooms and Whisks.—Victoria Broom & Whisk Factory organized; T. W. Zear, Pres.; Emile Sitterle, V.-P.; E. A. Morgan, Secy.-Treas.; mfr. brooms and whisks; has building and material; daily capacity 50 doz. (Lately noted inceptd., \$9000 capital.)

Tex., Waco—Coffee and Extracts.—Texas Coffee & Extract Co., capital stock \$50,000, inceptd. by J. A. Birkhead, J. P. McPherson and P. A. Birkhead.

Va., Norfolk—Bakery.—Clipper Bakery, capital stock \$5000, inceptd.; M. S. Winner, Pres.; C. J. Rivenbark, Secy.

W. Va., Parkersburg—Corrugated Paper.—Parkersburg Corrugated Paper Co., capital stock \$50,000, inceptd. by S. W. Goff, F. C. Goff, E. M. Utterback and others.

MOTORS AND GARAGES

Ala., Birmingham—Garage.—Electric Garage, capital stock \$2500, inceptd.; Eugene D. Henley, Pres.; S. C. Harrell, Secy.

Ga., Atlanta—Automobiles.—Ben J. Massell will erect automobile salesrooms; 3 stories and mezzanine floor; 21x100 ft.; mill construction; cost about \$10,000.

Mo., Carrollton—Garage.—W. F. Heins will erect addition to garage on E. Benton St.; 50x75 ft.; concrete; iron roof.

N. C., Raleigh—Garage.—E. S. Jennings will erect garage on W. Davis St.; 1 story; cost \$400.

N. C., Southern Pines—Garage.—W. V. Prillaman, Box 231, contemplates erecting garage; 50x100 ft. (See Machinery Wanted.)

Okla., Oklahoma City—Garage.—Fremont Motor Co., capital stock \$10,000, inceptd. by B. Fremont and others; to equip repair plant and garage.

Okla., Skiatook—Garage.—Skiatook Garage Co. organized with W. J. Schafer, Pres.; C. L. Wall, V.-P.; L. E. Mason, Secy.-Treas.; will establish garage and power machine shop for automobiles; lately noted inceptd. with \$4000 capital stock. (See Machinery Wanted.)

Tenn., Memphis—Automobiles.—Memphis Taxicab Co. inceptd. by T. F. Moore, C. B. Lockwood, Wm. O'Halloran and others.

Tex., Laredo—Automobiles.—Laredo Auto Sales Co., capital stock \$12,500, inceptd. by J. R. Moore, W. J. Sames and J. E. Applewhite.

Va., Norfolk—Cyclecars.—Cyclecar Sales Co., Eugene L. deHeigh, Secy., 842 Granby St., is distributing agent for cyclecar manufacturers and will engage in general automobile repair work. (Lately noted inceptd. with \$25,000 capital stock. (See Machinery Wanted.)

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Ky., Paducah.—Illinois Central R. R., A. S. Baldwin, Ch. Engr., Chicago, Ill., is reported to erect car-repair shops; electric power.

ROAD AND STREET WORK

Ala., Decatur—Chamber of Commerce and Limestone county citizens will co-operate to construct road through river bottoms in Limestone county to north bank of Tennessee River.

Ala., Vernon.—Lamar county will improve Millport and Vernon Rd.; grade and gravel between stations 78 and 178, gravel between stations 260 and 360 and grade, drain and gravel between stations 380 and 426; estimated cost, \$6,542.26; County Commrs. receive bids until Apr. 11; W. S. Keller, State Highway Engr., Montgomery, Ala. (See Machinery Wanted.)

Fla., Euclid.—City will construct paving and sewerage system and bulkheading; amount available, \$30,000; Isham Randolph Co., Engr., Atlanta, Ga. (Lately noted as voting bonds.)

Ga., Augusta.—City passed ordinance providing for sidewalk paving and curbing on portion of Chafee Ave.; estimated cost, \$2083; Nisbet Wingfield, Commr. Public Works.

Ga., Pelham.—City votes Apr. 15 on \$1000 bonds for paving. Address The Mayor.

Ky., Knob Lick.—G. A. Forrest of Glasgow, Ky., and others (lately noted as having inceptd. Knob Lick & Blue Spring Pike Co.) will construct graveled road; cost \$3500; E. H. Alexander, Engr., Knob Lick.

Ky., Louisville.—Board of Public Works let following contracts for street work: Asphalt reconstruction—Bardstown Rd., Bickel Asphalt Paving Co., \$30,559; Broadway, American Standard Asphalt Co., \$27,145; Walnut, St., Bickel Paving Co., \$14,239; Jefferson, 17th to 19th, Louisville Asphalt Co., \$13,483; Market, 19th to 27th, Louisville Asphalt Co., \$19,849, and Barrett Ave., Bickel Paving Co., \$5187. Brick reconstruction—Shelby, Kentucky to Oak, G. W. Gosnell & Co., \$9104. Bituminous concrete—Everett Ave., Henry Bickel Co., \$2972; St. Catherine St., concrete foundation, American Standard, \$4913. Original construction, with brick—9th St., G. W. Gosnell & Co., \$6330; 23d, Rowan to Duncan, L. R. Figg, \$3642; Main, 28th to 29th, L. R. Figg & Co., \$4993. Asphalt construction—Deer Park, Bardstown Rd. to

Schwartz, Bickel Paving Co., \$3240; Deerwood, Bardstown Rd. to Schwartz, Bickel Paving Co., \$3368, and Dearborn, Broadway to Garland, Louisville Asphalt Co., \$10,700. (Lately noted.)

Ky., Mt. Sterling.—Montgomery County Commrs. let contract at \$13,700 to Thomas F. O'Neill to construct Luther P. Warder Rd.

Ky., Paducah.—McCracken county will expend \$37,000 for road construction. Address County Commrs.

La., Alexandria.—Cottle Ward, Rapides Parish, will construct about 7 mi. gravel road; \$30,000 available; I. W. Sylvester of Alexandria will probably be engineer; C. E. Robinson, Prest. Police Jury, Crane, La. (Lately noted.)

La., Baton Rouge.—East Baton Rouge Parish Road Dist. No. 2 will vote Apr. 11 on \$18,000 bonds. Address Parish Police Jury.

La., Lafayette.—City Council authorized Mayor to enter into contract with Aberdeen Cement Co., Aberdeen, Miss., to construct 15 mi. cement sidewalks at \$71,000. (Lately noted.)

La., Lake Charles.—City let contract at \$17,000 to Kaw Paving Co., Topeka, Kan., to pave Broad Ave. from Bilbo to Louisiana Aves. (Lately noted.)

La., New Iberia.—City let contract to H. H. Sealy for cement sidewalks in entire southern section of city. Address The Mayor.

La., New Orleans.—City, A. G. Ricks, Commissioner, opened bids to construct shell road-way and shell footwalk pavements in West End Lake Park; Jones S. Irvine lowest bidder at \$53,345.50. (Lately noted.)

Md., Baltimore.—City will curb and pave with sheet asphalt commercial and recreation pier, Thames St. between Broadway and Ann St.; bids until Mch. 25; O. P. Lackey, Harbor Engr.; lately noted as rejecting all bids. (See Machinery Wanted.)

Md., Baltimore.—Maryland State Roads Com., O. E. Weller, Chmn., 601 Garrett Bldg., invites bids until Mch. 31 to construct 5 sections of State Highway amounting to 16.69 mi. in Baltimore, Garrett and Wicomico counties and 1 bridge in Prince George's county. (See Machinery Wanted.)

Md., Baltimore.—Maryland State Road Com., O. E. Weller, Chmn., 601 Garrett Bldg., Baltimore, let following contracts: Van Construction Co., Cumberland, Md., for paving State road with concrete (3 mi.) in Allegany county; Frank A. Duvall, St. Margaret, Md., R. F. D. from Annapolis, contract AA-7, for 4.1 mi. macadam or gravel road in Anne Arundel county, estimated cost \$47,294; V. E. Carpenter & Co., Baltimore, for concrete or gravel road from Chesapeake City to Fredericktown (5 mi.) in Cecil county; H. S. Swann, La Platte, Md., for 5 mi. concrete or gravel road in Charles county at \$49,331; N. Juniata Paving Co., Empire Bldg., Philadelphia, Pa., for contract K-7 for 1½ mi. macadam or concrete road in Kent county at \$33,578; Field, Barker & Underwood, Arcade Bldg., Philadelphia, Pa., for contract W-3 for 3.13 mi. concrete or macadam road in Worcester county. (Lately noted call for bids.)

Md., Easton.—Talbot County Commrs. let contract to Holt Construction Co., Denton, Md., to construct 1 mi. road and 1 90-ft. concrete bridge; amount available, \$20,000; previously noted. (See Machinery Wanted.)

Md., Oakland.—Garrett county will build section of State-aid highway along Oakland-Gardner Rd. by way of Weber's, distance of about 5 mi.; bids until Apr. 20; A. G. Ross, Clerk; blank forms, etc., obtainable on application to State Roads Com., 601 Garrett Bldg., Baltimore. (See Machinery Wanted.)

Miss., Booneville.—Supprs.' Dist. No. 1 of Prentiss county, G. L. Holley, Secy. Highway Commrs. will improve about 3.5 mi. of roads; novaculite, gravel or crushed stone used for finishing surface; probably concrete in construction of smaller bridges and large culverts; bids until Apr. 6; Xavier A. Kramer, Engr., Magnolia, Miss. (See Machinery Wanted.)

Miss., Canton.—Madison County Highway Commrs., W. E. Mann, Secy., will permanently improve about 14.5 mi. roads in Dist. No. 3; gravel used for finishing surface compacted with roller; concrete used in constructing smaller bridges and larger culverts; bids invited on entire work until Apr. 6; Xavier A. Kramer, Engr., Magnolia, Miss. (See Machinery Wanted.)

Miss., Decatur.—Newton county will vote Mch. 24 on bonds for permanent roads. Address Commrs.

Miss., Forest.—Scott county will improve about 7 mi. of road; use local gravel; construct bridges and culverts in connection; W. A. Turner, Secy. Highway Commrs. Supprs.' Dist. No. 1, receives bids until Apr.

6; Xavier A. Kramer, Engr., Magnolia, Miss. (See Machinery Wanted.)

Mo., Cameron.—City let contract to St. Joseph company to construct street paving. Address The Mayor.

Mo., Independence.—Jackson County Commissioners let contract at \$11,600 to Spitzkaufsky & Gedeusky, Kansas City, Mo., for improvements to road from Greenwood east.

Mo., St. Louis.—City will improve Gravois Ave. from Spring Ave. to southwestern city limits; bids until Mch. 24. Further information from Board of Public Improvements and Street Commr. (See Machinery Wanted.)

Mo., Webster Groves.—City will open bids Apr. 13 to construct 15,000 sq. yds. 6-inch concrete pavements; R. L. Mook, City Engr.; lately noted. (See Machinery Wanted.)

N. C., Durham.—City will grade 3 streets and construct concrete curb and gutter along same; about 8500 cu. yds. excavation and 7500 lin. ft. curb and gutter; information on application to City Engr.; bids until Mch. 20. (See Machinery Wanted.)

N. C., Greensboro.—City contemplates voting on \$50,000 bonds for street improvements and schools. Address The Mayor.

N. C., Laurinburg.—City accepted report of Jas. L. McNair and others and will pave Main St.; about 1400 ft.; plans not definite; W. D. Tucker, Mayor.

N. C., Winston-Salem.—Forsyth County Commrs. let contract to J. M. and C. B. Hester of Kernersville to grade Clemmons Rd. from Mudd Creek to Yaddin River.

Okla., Okemah.—Okfuskee County Commrs. let contract Kelley F. Gibson Construction Co., Broken Arrow, Okla., to construct 25 mi. graded dirt road; bridges and culverts in connection; cost about \$25,000; A. H. Collins, State Highway Engr., Oklahoma City, in charge. (Lately noted.)

S. C., Greenville.—City will lay about 3000 sq. yds. concrete drive and 4000 lin. ft. combination cement curb and gutter in Springwood Cemetery; also erect ornamental granite and limestone entrance at cemetery; bids until Mch. 20; John B. Marshall, Mayor. (See Machinery Wanted.)

S. C., Lancaster.—City will issue \$13,000 street bonds. Address The Mayor. (Previously noted contemplating vote.)

Tenn., Athens.—City will vote in about 30 days on \$30,000 bonds to improve streets and pay indebtedness; John W. Bayless, Mayor.

Tenn., Kingston.—Roane County Pike Commissioners will issue \$110,000 road bonds. (Previously noted.)

Tenn., Knoxville.—J. Boyd McCalla, City Engr., is preparing plans to repave Gay St.

Tenn., Knoxville.—Knox County Commrs. let contract at \$6000 to R. L. Peters to repair Martin Mill Rd.; at \$1000 to J. Rans Simpson to grade Beaumont Rd.; rejected bids for repaving Sevierville pike, and will again call for bids.

Tenn., Nashville.—City has sold \$635,000 bonds for street improvements; work expected to begin in Apr.; J. W. Dashiell, Secy. Commrs.

Tex., Bastrop.—Precinct No. 1 of Bastrop county is reported to vote on \$70,000 additional road and bridge bonds. Address County Commrs. (Lately noted as voting \$50,000 bonds.)

Tex., Conroe.—Montgomery County Dist. No. 1 issued \$100,000 road bonds; W. M. Williams, County Judge.

Tex., Corsicana.—City let contract at about \$52,000 to General Construction Co., Fort Worth, for street paving; vitrified verticle fiber brick with asphalt filling on cement foundation. (Lately noted.)

Tex., Denton.—Denton County Road Dist. No. 3 votes Apr. 25 on \$22,500 bonds for road construction. Address County Commrs. (Lately noted.)

Tex., Galveston.—Galveston county will shell and bulkhead 61st road between causeway road and beach; bids until Mch. 23; John M. Murch, County Auditor. (See Machinery Wanted.)

Tex., Houston.—City, E. B. Bonney, Secy., will pave Crawford St. from north line of Dallas Ave. to south line of Texas Ave.; bids until Mch. 25; E. E. Sands, City Engr. (See Machinery Wanted.)

Tex., Houston.—City will construct standard combined curbs and gutters on sections of 10th, Johnson, Colorado and Henderson Sts.; E. B. Bonney, City Secy., receives bids until Mch. 19. Ben Campbell, Mayor. (See Machinery Wanted.)

Tex., Kaufman.—Forney Justice Precinct No. 2 voted \$225,000 bonds to construct roads; Terrell Precinct defeated bonds; Jason Sowell and J. M. Lewis of Forney are in control of bonds; Henry Sparks, County Clerk. (Lately noted.)

Tex., Liberty.—Liberty County Commrs. let contract at \$100,000 to Harvey Mecom, Liberty, to construct 20 miles of shell roads.

Tex., Plano.—Collins county votes Apr. 11 on \$100,000 bonds for roads. Address County Commrs.

Tex., Timpson.—City votes Apr. 7 on \$10,000 bonds to construct cement sidewalks. J. W. Hawthorn, Mayor. (Lately noted.)

Va., Portsmouth.—City is reported to expend \$50,000 for paving and street improvements; V. O. Cassell, City Engr.

Va., Richmond.—City will construct granolithic curbs, gutters and sidewalks, sewers, grading and graveling; bids opened Mch. 16; Chas. E. Bolling, City Engineer. (See Machinery Wanted.)

Va., Richmond.—City will pave with granolithic unpaved portions of sidewalks on both sides of Beverly from Randolph to Addison Sts., and both sides of Beverly St. from Addison to Boulevard; and brick sidewalk on unpaved portion on east side of Randolph St. from Carey to Riverview Cemetery; bids until Mch. 16; Chas. E. Bolling, City Engr.

W. Va., Bluefield.—City let contract to B. F. Baker for paving Jefferson St. with Texaco binder at \$1.28 per sq. yd., and at \$1.39 per sq. yd. for standard binder on Washington St. (Lately noted.)

W. Va., Parkersburg.—Williams Dist. of Wood county voted \$70,000 bonds for road construction; Wm. Dudley, Clerk County Court. (Lately noted.)

SEWER CONSTRUCTION

Ala., Ensley.—Board of Revenue authorized improvements to sewage-disposal plant to cost \$6000; L. H. Salter, County Sanitary Engr.

Ala., Hartsboro.—City let contract to J. B. McCrary Co., Third National Bank Bldg., Atlanta, Ga., to make surveys for sewer system; cost about \$10,000; will issue bonds; Wheeler Williams, Mayor.

Ala., Thomasville.—City will vote on bonds for sewers and water-works. Address The Mayor. (Previously noted.)

Ala., Tuskegee Institute.—Tuskegee Normal and Industrial Institute, R. R. Taylor, Director of Industries, will construct sanitary sewer system and sewage-disposal plant; bids being asked; Walter G. Franz, Consult. Engr., Union Trust Bldg., Cincinnati, O.; probable expenditure lately noted as \$240,000 for electrical system, water distribution system, steam piping and sewer system. (See Machinery Wanted.)

Ark., Van Buren.—City sold \$9000 sewer-construction bonds. Address The Mayor.

Fla., Eustis.—City will construct sewers, paving and bulkheading; amount available, \$30,000; Isham Randolph Co., Engr., Atlanta, Ga. (Lately noted as voting bonds.)

Fla., Manatee.—City let contract to J. L. Minnis, Engr., Tarpon Springs, Fla., to make surveys for sewer system and other improvements. (Previously noted contemplating \$100,000 bond issue.)

Fla., Punta Gorda.—City will construct sewer system and water-works; bids until Mch. 24; J. F. Corbett, Clerk of Board of Bond Trustees; W. P. Bullock, Engr., 3900 Gladstone, Kansas City, Mo. (See Machinery Wanted.)

Ga., Arlington.—City let contract at \$15,800 to J. B. McCrary Co., Third National Bank Bldg., Atlanta, to construct sewer system. (Lately noted.)

Ga., Augusta.—Nisbet Wingfield, City Engr., is preparing plans and specifications for sewer construction in connection with flood-protection plan; probably let contract about April 10. (Previously noted.)

Ga., Forsyth.—City will construct sewers on Lee St.; D. Tribble, Chmn. Sanitary Committee.

Ga., Pelham.—City votes Apr. 15 on \$1000 bonds for extension to sewer system. Address The Mayor.

Ga., Royston.—City will issue \$5000 sewer bonds. C. B. Wellborn, Mayor.

Md., Baltimore.—City will construct lateral sewers and house connections in Dist. No. 7, Contract No. 123; 13,350 lin. ft. 3-in. to 15-in. diam. sewer, and 11,500 lin. ft. vitrified pipe house connections in trench; bids until Apr. 1; Chas. England, Chmn. Sewerage Com. (See Machinery Wanted.)

Md., Baltimore.—City will construct section No. 1 of Ferry Point trunk sewer, Sanitary Contract No. 132; bids until Mch. 25; 300 lin. ft. 27-in. diam. sewer and 700 cu. yds. earth excavation; Chas. England, Chmn. Sewerage Com. (See Machinery Wanted.)

Mo., Hannibal.—City, John Dreyer, Mayor, will construct about 30,000 ft. 6-in. pipe sewers, average cut 9 ft., and about 3000 ft. con-

crete sewer 4x4 ft., 6x4 ft., 5x4 ft. and 3x3 ft.; cost about \$32,000. (Lately noted.)

Mo., Springfield.—City, C. E. Phillips, City Engr., let contract at \$11,000 to Plummer-Adams Co. to construct sewers in Dists. 18 and 4. (Lately noted.)

Mo., St. Louis.—Board of Public Improvements let contract at \$33,247 to Brooks & Burkhart Contracting Co., St. Louis, to construct sewers on S. Gravois Ave. (Lately noted.)

N. C., Sylva.—City engaged J. B. McCrary Co., Atlanta, Ga., as engineer for sewer and water-works; cost \$50,000. (Lately noted.)

S. C., Columbia.—City voted \$500,000 bonds for sewer and water-works extension; estimated to construct 20 mi. of water mains and 40 mi. of sewers; John McNeal, City Engr. (Lately noted.)

S. C., Lancaster.—City will issue \$45,000 bonds for sewers. Address The Mayor. (Previously noted contemplating vote.)

S. C., Mullins.—City will install sewerage system and water-works; sold \$60,000 bonds; plans not yet prepared; bids probably asked in about 90 days; Gilbert C. White, Consult. Engr., Charlotte, N. C.

Tex., Brenham.—City appointed committee to investigate advisability establishing electrolytic sewerage disposal plant. Address The Mayor.

Tex., Ennis.—Ennis Sewer Co. increased capital stock from \$20,000 to \$30,000 and will construct extension to system.

Tex., Gilmer.—City will construct sewer system, consisting of 930 ft. 12-in., 1400 ft. 10-in., 6300 ft. 8-in. and 7000 ft. 6-in. vitrified sewer pipe; 34 manholes, 2 flush tanks and reinforced concrete sewage treatment tank; bids until Apr. 2; Nagel & Petersen, Engrs., 308 Courthouse Bldg., Muskogee, Okla.; T. H. Briggs, Mayor. (See Machinery Wanted.)

Tex., Granger.—City votes April 7 on \$15,000 bonds to construct sewers. Address The Mayor.

Va., Richmond.—City will construct concrete sewer along Bacon Quarter Branch; length, 800 ft.; Section No. 21; Chas. E. Bolling, City Engr., receives bids until Mch. 20. (See Machinery Wanted.)

W. Va., Bluefield.—City will construct 16-in. vitrified sanitary sewer from sewer in South Bluefield to Graham, Va.; length 17,000 ft.; Board of Affairs receives bids until Apr. 3 (not Apr. 31, as lately incorrectly noted); J. T. Akers, Auditor. (See Machinery Wanted.)

TELEPHONE SYSTEMS

Ala., Mobile.—Tidewater Securities Corp., Birmingham, Ala., plans to construct combined aerial and submarine telegraph and telephone line from mainland at Cedar Point to Dauphin Island.

Ga., Savannah.—Southern Bell Telephone Co. will construct exchange annex at Drayton and Congress Sts.

Ky., Jamestown.—Russell Home Telephone Co. Incptd. by C. I. Medaris, Frank Lapsley and Erasmus Kimble.

N. C., Snow Camp.—Snow Camp Mutual Telephone Co., capital stock \$5000, incptd. by David H. Thompson, Jas. H. Roach, Claud F. Cible and others.

Tenn., Chattanooga.—Cumberland Telephone & Telegraph Co., Louisville, Ky., will install equipment extending from Hemlock exchange to Rossville; cost about \$20,000.

Tenn., Shelbyville.—Pleasant Grove Telephone Co. Incptd. by J. W. Frost, George Shofner and Roscoe Shofner of Flat Creek and others.

Tex., Sweeney.—Sweeney Co-operative Telephone Co. organized with L. A. Riley, Prest.; O. Schadler, V.-P.; L. W. Engberg, Secy.

TEXTILE MILLS

Ga., Columbus.—Bagging.—Julius Friedlander will improve bagging mill.

Ga., Hawkinsville.—Sheeting, etc.—Hawkinsville Cotton Mill, capital stock \$75,000, organized with C. P. Gentry, Prest., Greenville, S. C.; purchased Hawkinsville cotton mill and will overhaul machinery; plant has 144 looms and 3000 spindles; purchased 24 automatic looms; weekly output about 7000 lbs. or 23,000 yards of sheeting.

Ga., West Point.—Cotton Cloth.—Riverdale Cotton Mills will enlarge clothroom; cost about \$10,000; let contract in few days; Park A. Dallas Co., Archt., Candler Bldg., Atlanta.

Ky., Louisville.—Cotton Yarn.—Sterling Spinning Co., capital stock \$25,000, incptd. by George Dunham, M. W. Brock and J. S. McElroy, Jr.

Md., Elkton.—Cotton Cloth.—Delbert Mfg. Co. will erect building 141x56 ft.; 2 stories;

concrete and brick; cost \$12,000; install 40 looms; electric power. (Lately noted.)

Mo., Kansas City—Rope.—Hooven & Allison Co. let contract to Harvey Silver, Kansas City, to erect rope mill structure; west wing of building 23x133 ft.; 1 story except at northwest corner, where will be 2 stories; south wing 28x88 ft., one story and basement making total length 515 ft.; cost \$100,000; Smith, Rea & Lovitt, Architects.

N. C., Durham—Hosiery.—North State Knitting Co. acquired mill established by W. J. Berry; has 60 knitting machines, 10 looms, etc., driven by electric power; organized with J. S. Carr, Jr., Pres.; C. M. Carr, Treas.; W. J. Berry, Mgr.-Supt. (Previously reported inceptd. with \$24,000 capital.)

N. C., Durham—Hosiery.—Durham Hosiery Mills let contract Fiske-Carter Construction Co., Greenville, S. C., to erect mill building 42x106 ft. for Mill No. 6, and storage warehouse 150x100 ft.; reported contract price, \$100,000; install, on first floor of mill building, patented process for spinning of waste yarns to supply Mill No. 2, and 7600 new spindles on second and third floors; also let contract to erect 15 employees' dwellings costing from \$500 to \$1000 each; will install 10 more looping machines in homes of former employees unable to go to mill. (Lately noted.)

N. C., Elizabeth City—Hosiery.—Pasquotank Hosiery Co., capital stock \$50,000, inceptd. by T. V. Scott, M. G. Morrisett and D. van Horn.

N. C., Kernersville—Hosiery.—American Hosiery Mills Co. plans changes and improvements.

N. C., Marion—Print Cloth.—Clinefield Mfg. Co., capital stock \$500,000, organized with D. D. Little Pres.; other officers not elected; will build cotton mill; 26,000 spindles 600 looms; steam-power; machinery ordered; Archt.-Engr., J. E. Silrine, Greenville, S. C. (Lately noted.)

N. C., Newton—Hosiery.—Catawba Woolen Mills reported to install hosiery knitting machinery.

N. C., Norwood—Cotton Yarns.—Norwood Mfg. Co. is reported to double equipment; now operating 15,336 spindles.

N. C., Rockingham—Cotton Cloth.—Hannah Pickett Mills is preparing to install 4500 spindles, 100 40-in. looms and other machinery; erect addition to mill building and 10 to 12 tenant-houses; also arranging to discard steam plant and substitute electric drive.

S. C., Lexington—Cotton Cloth.—Lexington Mfg. Co. increased capital stock from \$100,000 to \$400,000.

Tenn., Charleston—Hosiery.—Charleston Hosiery Mills, authorized capital \$50,000, organized; erect 1-story brick building with basement; install knitting machines for hosiery production; W. J. Eldredge, Pres.; T. B. Saulpaw, V.-P.; J. E. Quisenberry, Secy.-Treas.

Tenn., Jasper—Hosiery.—E. E. Johnson interested in plan to establish hosiery knitting mill.

Tenn., Knoxville—Hosiery.—Jacob Spiro plans to establish hosiery knitting mill.

W. Va., Martinsburg—Worsted and Cassimere.—Geo. M. Bowers, Pres. People's Trust Co., and H. H. Rutherford purchased plant of Martinsburg Worsted & Cassimere Co.; organize \$100,000 company to operate plant.

WATER-POWER DEVELOPMENTS

Ga., Macon.—Central of Georgia Power Co. and Central Georgia Transmission Co. are reported as to install additional generators for plant at Butts county dam; cost about \$100,000; increase capacity to 24,000 H. P.

N. C., Watauga.—David R. Shearer, Knoxville, Tenn., is preparing plans for dam and electric-light plant at Appalachian Training School.

WATER-WORKS

Ala., Thomasville.—City will vote on bonds for water-works and sewers. Address The Mayor. (Previously noted.)

Fla., Jacksonville.—Board of Bond Trustees, Frank Richardson, Chmn., will remodel and extend pumping station at water-works and substation building of power plant, according to plans and specifications by Sargent Hamilton, on file in Engineering Dept.; bids until Apr. 6; previously noted. (See Machinery Wanted.)

Fla., Punta Gorda.—City will construct water-works and sewerage system; bids until Mch. 24; J. F. Corbett, Clerk of Board of Bond Trustees; W. P. Bullock, Engr., 2609 Gladstone, Kansas City, Mo. (See Machinery Wanted.)

Ga., Forsyth.—City will extend water-works from old city limits to new territory

on Railroad Ave.; D. Tribble, Chmn. Sanitary Committee.

Ga., Pelham.—City votes Apr. 15 on \$1000 bonds for extension to water-works and electric-light system. Address The Mayor.

Ga., LaGrange.—City engaged Jas. N. Hazellhurst, Atlanta, Ga., as engineer in charge of constructing water-works; daily capacity, 5,000,000 gals.; brick building; reservoir and tank; cost \$150,000; open bids in 1914, date not decided; J. D. Edmundson, Mayor. (Lately noted.)

Ga., Royston.—City will issue \$30,000 water-works bonds. C. B. Wellborn, Mayor.

Ky., Elkton.—City will sell water-works franchise. Address City Clerk.

La., Alexandria.—Alexandria Electric Light and Water-works, J. C. Raxdale, Supt., has plans for enlargement and extension of power-house; will install additional machinery.

La., Hammond.—City will install two oil pumps and engines with capacity of 750 gals. per minute each, for water system; also lay several thousand ft. 6-in. water-main extensions; Xavier Kramer, Engr., Magnolia, Miss. (Lately noted voting \$18,000 bonds.)

La., New Iberia.—City will install water purification plant and extend water mains; \$40,000 available for water-works, electric lights, etc. Address The Mayor.

La., Shreveport.—City votes April 15 on \$1,000,000 bonds to construct water-works. Address The Mayor. (Lately noted.)

Miss., Tunica.—City, M. J. Alexander, Clk., will construct water-works; bids Apr. 7; lately noted as having plans prepared by Fairbanks & Co., New Orleans. (See Machinery Wanted.)

Miss., Vicksburg.—City will expend \$340,000 to construct water-works; Dabney Engineering Co., Porter Bldg., Memphis, Tenn., Engr. and Supt. of Constr. (Lately noted.)

Mo., Sedalia.—Public Service Com. ordered Sedalia Water Co. to install filtration plant and system.

N. C., Sylva.—City engaged J. B. McCrary Co., Atlanta, Ga., as engineer for water-works and sewer system; cost \$50,000. (Lately noted.)

Okla., Cordell.—City will extend water-works and develop new source of supply; engaged Benham Engineering Co., Oklahoma City, Okla., to make investigations and prepare plans, specifications and estimates; cost estimated at \$50,000; votes in April on bonds.

Okla., Stratford.—City votes Apr. 7 on \$29,000 bonds to construct water-works; Benham Engineering Co., Engr., Oklahoma City, Okla.

S. C., Columbia.—City voted \$500,000 bonds for water-works and sewer extension; estimated to construct about 20 miles of water mains and 40 miles of sewers; John McNeal, City Engr. (Lately noted.)

S. C., Lancaster.—City will issue \$12,000 water-works bonds. Address The Mayor. (Previously noted contemplating vote.)

S. C., Mullins.—Public Works Com. will install water-works and sewerage system; sold \$60,000 bonds; plans not yet prepared; bids probably asked in about 90 days; Gilbert C. White, Consult. Engr., Charlotte, N. C.

Tenn., St. Elmo.—City Water Co., Chattanooga, Tenn., contemplates extending service.

Tex., Galveston.—John B. Hawley, Engr., Fort Worth, recommends that two 12-in. wells, equipped with centrifugal pumps, electric motors and oil engines, be added to equipment of Alta Loma pumping station; installation of new boiler, repairs to steam piping, installation of number of valves, etc., to cost about \$33,000; improvements to increase capacity of plant to pump 1,000,000 gals. water; also install storage reservoir on island; about 6,000,000 or 10,000,000-gal. tank, to cost about \$80,000. (City lately noted as voting \$15,000 bonds.)

Tex., Rockdale.—City voted \$27,000 bonds; negotiating for purchase Rockdale Water & Light Co.'s plant; if plant is not purchased, will construct water system. (O'Neil Engineering Co., Dallas, lately noted as submitting estimates to construct water-works.)

Tex., Runge.—City will install water-works; Bartlett & Ranney, Engrs., San Antonio, Tex.

Tex., Timpson.—City votes Apr. 7 on \$17,000 water-works bonds. Address The Mayor. (Lately noted.)

Va., Norfolk.—Finance Committee recommended \$75,000 appropriation to extend water-meter system. W. T. Brooke, City Engr.

WOODWORKING PLANTS

Fla., Bluff Springs.—Escambia Veneer Co. increased capital stock from \$6000 to \$30,000.

Fla., Tampa—Furniture.—Walker-Mulligan-Hood Furniture Co., capital stock \$10,000, inceptd.; W. T. Walker, Pres.; A. R. Hood, V.-P.; A. J. Mulligan, Secy.

Ga., Brunswick—Furniture.—H. M. Miller Furniture Co. will erect plant for manufacturing furniture.

Ky., Winchester—Parquetry.—Federal Parquetry Mfg. Co., main office, 175 5th Ave., New York, will establish plant; daily capacity 20,000 ft. parquetry squares; building and machinery contracts let; Lawrence Ottinger, Pres.-Treas.; Mark Workman, V.-P.; Ignatz Herz, Secy.-Mgr. (Lately noted incorporated with \$100,000 capital stock.)

La., New Orleans—Staves.—General Coe & Lumber Co. inceptd. with capital stock \$100,000.

Md., Federalsburg—Fruit Package.—John C. Foster is reported to rebuild lumber and fruit package mill, lately noted burned with loss of \$15,000.

Mo., Kansas City—Needles.—Velvaton Wood Needle Co., capital stock \$20,000, incorporated by Fay Alexander, O. A. Schramm and Allen C. Flansburg.

N. C., Asheville—Chairs.—Piedmont Chair Co., capital stock \$25,000, inceptd. by C. C. Crawford, C. L. Crawford, E. H. Crawford and W. C. Page.

N. C., Fayetteville—Buckets, Tubs, etc.—Cowell Woodenware Co. organized with C. S. Russell, Pres.; T. S. Tolar, V.-P.; J. C. Cowell, Secy.; will erect plant to mfr. water pails, candy pails, lard tubs, etc.; has tentative plans for building 200x65 ft. (Lately noted inceptd. with \$100,000 capital stock.)

N. C., Winston-Salem—Building Material.—J. H. Phillips purchased 687x150-ft. site and will erect plant to manufacture building materials; brick; 2 stories.

S. C., Columbia—Veneer.—Columbia Veneer Co., capital stock \$90,000, inceptd.; C. T. Alexander, Pres.; B. A. Sigman, Secy.; to establish veneer plant at College Place; offices on 14th floor Palmetto Bldg.

Tex., Dearborn—Staves.—Prescott Stave & Heading Co., Prescott, Ark., acquired 50,000,000 ft. hardwood timber on 15,000 acres in S. E. Texas, 20,000 ft. being white oak; will install sawmill plant with 30,000 capacity to cut into lumber all timber not suitable for beer staves and heading.

Tex., Waco—Boxes.—Frank Dillman, Pres. Dillman Egg Case Co., Caruthersville, Mo., is reported to establish woodworking plant.

Va., Portsmouth—Wood Products.—Southern Wood Products Co., authorized capital \$60,000, inceptd.; O. B. Lay, Pres.; C. F. Olm, Secy.

FIRE DAMAGE

Ala., Killen.—J. B. McPeters' cotton gin, saw and grist mill; loss \$4000.

Ala., Louisville.—W. C. Bell's warehouse; W. H. McEachern & Sons' store; S. F. Jenkins' store; P. L. Pierce's store; Bank of Louisville; Grant Bros.' store; total loss, \$50,000.

Ala., Mobile.—American Grain & Fertilizer Co.'s warehouse at foot of Adams St.; loss about \$50,000.

Ark., Griffithville.—Two buildings owned by A. J. Smith, loss \$8000; Mrs. Mulherin's store; W. H. Wallis, boarding-house; C. H. Adams' hotel; total loss \$15,000.

Ark., Pekin.—Pekin Stave Mill, E. E. Randolph, Mgr.; loss about \$4000.

Ark., Spadra.—Spadra Creek Coal Co.'s "Monkey Run" coal mine plant; reported loss \$50,000; general office, Clarksville, Ark.

Fla., Marianna.—W. H. Milton's residence; loss about \$20,000.

Fla., Jacksonville.—B. Cummings' residence at 2914 Evergreen Ave., occupied by E. H. Geiger.

Ga., Atlanta.—T. H. Brooks & Co.'s warehouse.

Ga., Brunswick.—Mrs. Frederick Baker's residence on Jekyll Island; loss \$35,000.

Ga., Chauncey.—Max Gilmore's residence; loss about \$6000.

Ga., LaGrange.—Galloway Department Store, Fuller Galloway, Mgr., loss \$75,000; S. H. Kress & Co.'s building, main office, 396 Broadway, New York; postoffice.

Ga., Louisville.—Building owned by W. M. Whigham and R. L. Bostick, occupied by Louisville Drug Co. and R. L. Bostick; loss \$7000.

Ga., Macon.—J. W. Johnson's store on Forsyth Rd. near Crump's Park; loss \$6000.

Ga., Ocilla.—General offices of Ocilla Southern R. R. Co.; loss on buildings, owned by J. A. J. Henderson, Pres. of company, several thousand dollars.

Ga., Statesboro.—Bullock Oil Mills, owned

by Blitch-Ellis Mfg. Co. (W. H. Ellis and J. G. Blitch).

Ky., Glasgow.—Wilbur C. Moss' residence on Maple Driveway; loss \$6000.

Ky., Litterock, R. F. D. from Paris.—Dormitory of graded school; Evans Grocery Co.'s store; Litterock Home Telephone Co.'s building; Albert Evans' residence; Methodist church and parsonage, and feed stable; total loss \$30,000 to \$35,000.

Ky., Scottsville.—Meredith Infirmary; loss \$15,000.

La., Baton Rouge.—Louisiana Ry. & Navigation Co.'s passenger station; loss \$6000; Wm. Edenborn, Pres., New Orleans.

La., Clinton.—Residence on St. Helena St. owned by Eugene Adler of Baton Rouge; loss \$6000.

La., Houllonville.—Houllon Lumber Co.'s drykilns; loss \$5000.

La., Litcher.—J. O. Duhon's residence, owned by Litcher & Moore Cypress Lumber Co.; loss \$8000.

La., New Orleans.—Green & Knight Mfg. Co.'s sash, door and window blind factory; loss \$4000.

La., New Orleans.—Francis Nassens' moss factory at 2901-03 Perdido St.; loss \$4000.

La., Shreveport.—Rev. Wm. F. Roberts' residence; McMichael Bros.' residence.

Md., Baltimore.—Robert Eden School at Eden and Preston Sts.; loss \$4000; Jas. H. Preston, Mayor and Pres. Board of Awards.

Md., Lonaconing.—St. Mary's Catholic Church; loss \$4000; Rev. Jos. P. Nolan, pastor.

Miss., Rodney.—Jacob Wagner's barn near Rodney; loss on building \$4000.

Mo., Dexter.—Central Hotel; St. Francis Hotel; Elk Restaurant; Greer Restaurant; Skinner Shoe Co.'s store; Jennings Printing Co.'s building; Dexter Statesman's office; loss \$50,000.

Mo., Greenville.—Marsh-Wilkinson Mercantile Co.'s store; Frank G. Fray's blacksmith shop; Hall Building; Joe Shearer's store; Ray Bird's dwelling; Joe Starkey's dwelling.

Mo., Moberly.—Wabash R. R.'s car shops; A. O. Cunningham, Ch. Engr., St. Louis, Mo.; loss \$200,000.

Mo., St. Louis.—St. Louis Seed Co.'s building; loss \$35,000.

Okla., Kiefer.—Texas Oil & Gas Co.'s 50,000-barrel storage tank; loss \$50,000.

Okla., Kiefer.—Prairie Oil & Gas Co.'s 50,000-barrel oil tank; A. C. Hill's blacksmith shop; Lameing Livery Co.'s stable; Isis Theater; Kiefer Drug Co.'s store; Kiefer Telephone Co.'s exchange; Thompson Shoe Co.'s store; Dr. I. E. Gladden's office; Dr. E. F. Johnson's office; Sol Johnson's building; Claybaugh & Gauler's store; J. A. Hutchinson's building; total loss \$100,000.

Okla., Marlow.—Parks Hotel, J. J. Parks, Prop.; loss \$6000 to \$7000.

S. C., Clinton.—D. E. Tribble & Co.'s building.

S. C., Johnston.—Western Carolina Bank Bldg. and other structures; loss \$15,000.

S. C., Greenville.—School at Brandon Mill; loss several thousand dollars. Address The Mayor.

Tenn., Nashville.—Kenilworth Apartments at 15th Ave. and McGavock st., owned by C. K. Colley; loss \$4000.

Tenn., Winchester.—V. R. Williams' residence.

Tex., Austin.—A. L. Nelson's store at Elroy; loss \$8000.

Tex., Big Springs.—Warnack & Landandry's restaurant; I. H. Park's jewelry store; J. O. Gibson's store; Bialock Racket Co.'s store; total loss \$10,000.

Tex., Dallas.—Building owned by J. A. Bergfeld and others and occupied by Lee Liquor Co., Ben G. Gross Hat Co. and Grossman Co.; loss \$30,000.

Tex., Fort Worth.—Mrs. C. M. Nobbett's residence at 124 Holly St.

Tex., Hillsboro.—Mississippi Store; loss on building \$80,000.

Tex., Queen City.—W. W. Pritchard's gin, grist mill, sawmill and planer.

Tex., Sherman.—A. M. Teague's store at 216 W. Houston St.; building owned by W. C. Eubank; loss \$3000.

Tex., Tenaha.—W. L. Hooper's store; White & Taylor's store; A. C. McCann's store; J. W. Compton's store; J. D. McCleddy's store; loss \$6000.

Tex., Vernon.—W. G. McDonald's residence, loss \$5000; E. T. Murchison's residence, loss \$4000.

Va., Lynchburg.—Court Street Public School; loss \$8000. Address The Mayor.

Va., Rural Retreat.—Mrs. Virginia Alice Cassell's residence near Rural Retreat.

Va., Richmond.—Neale & Binford Tobacco Supply Co.'s plant at 17 S. 8th St.; loss \$10,000.

Va., Sanford.—Jno. S. Drummond's store building; loss \$5000.

W. Va., Bower.—Postoffice; Junior Mercantile Co.'s store; S. T. Davis Colliery Co.'s building; loss \$25,000.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Ala., Tuscaloosa.—W. S. Rose will erect apartment-house at 4th St. and 19th Ave.; 8 suites of 5 and 7 rooms; no general contract; brick; tile trimmings; steam heat from central plant; cost \$20,000.

Fla., Daytona.—D. J. Johnson is having plans prepared by E. S. Hall for apartment-house; pressed brick; 80x140 ft.; 3 stories; 60 suites; electric lights; steam heat; fire escapes; completion by Nov. 1.

Ga., Atlanta.—Mrs. C. C. Nicholes will erect 2-story frame apartment-house on Pittman Pl.; cost \$3000; day labor.

Ga., Atlanta.—L. G. Neal will erect brick-veneer apartment-house at North Ave. and Myrtle St.

Ga., Atlanta.—Citizens' Savings Bank & Trust Co. is having plans prepared for apartment-house at Piedmont Ave. and 14th St.

Ga., Atlanta.—Fitzhugh Knox will expend \$50,000 to erect apartment-house at Piedmont Ave. and 3d St.; two 90-ft. Ls; 3 stories and basement; ordinary construction; composition roof; vapor heat; electric lighting; Walker & Chase, Archts., Candler Bldg., Atlanta; day labor; subcontracts will include heating, wiring, plumbing, masonry, etc. (Lately noted.)

Ky., Louisville.—L. Keller & Son are reported to erect apartment-house on 3d St. between Avery and Brandels Sts.; 3 stories; 24 suites; cost about \$100,000.

La., New Orleans.—Lee McMillan is reported to erect 2 duplex apartments at St. Charles Ave. and Valmont St.; pressed brick with cement trimmings; red tile roofs; 4 apartments; site 68x170 ft.; will be terraced and surrounded by cement retaining wall.

Md., Baltimore.—Lombardy Apartment-House Co., 1523 Munsey Bldg. is receiving sub-bids to erect apartment-house at 39th St. and University Parkway; irregular shape; 35x110 ft.; wing 35x40 ft.; cost (without mechanical equipment) \$50,000; fireproof construction; tile and slag roof; steam heat; Clyde N. Friz, Archt., 1523 Munsey Bldg., Baltimore; construction under supervision of John F. Kunkel, 413 King St., Baltimore. (Lately noted.)

Md., Hagerstown.—Clarence Keedy will erect 3-story apartment-house.

Mo., Kansas City.—W. G. Joergens will erect apartment-house at 3614 Flora St.; brick, stone and stucco; 4 suites; cost \$6000.

Mo., Kansas City.—W. B. Weaver will erect five apartments in 4000 block Main St.; brick, stone and stucco; six suites each; cost \$55,000.

Mo., St. Louis.—Frank Nauwald will erect apartment-house on Red Bud Ave.; two suites.

Mo., St. Louis.—Chas. Levy of Hub Furniture Co. is reported contemplating erecting 2-story apartment at Clara and Waterman Aves.; six 8-room suites; frontage 90 ft.; also to erect 3-story single apartments, each to contain three 8-room suites on Waterman Ave. site, with frontage of 240 ft.

Mo., St. Louis.—Nolte & Nauman, 614 Fullerton Bldg., are preparing plans for apartment-house at Newstead and Lindell Sts.; 100x60 ft.; 6 stories; cost \$90,000; reinforced concrete; gravel composition roof; steam vacuum heat to cost \$4500; electric lighting; push-button freight and passenger elevator to cost \$4500 each; bids opened Feb. 20.

Mo., St. Louis.—J. R. McKee will erect 2-story tenement-house at 3415-17 Union St.; cost \$5500.

Mo., St. Louis.—Opportunity Realty & Investment Co. will erect store and apartment-house. (See Stores.)

Mo., St. Louis.—Lindell Fairground Real Estate & Investment Co. will erect apartment-house. (See Stores.)

Mo., St. Louis.—Wm. Degenhardt will erect 9 flats in South Side; suites of 2 to 4 rooms; completion by June 15.

Mo., St. Louis.—M. Wacker will erect two-story tenement-house at 4257 Red Bud Ave.; cost \$4900.

Mo., St. Louis.—Benbow Realty & Investment Co. will erect 3-story apartment-house at 4166 Russell Ave.; cost \$36,000.

Mo., St. Louis.—Jas. P. McInerney will erect flats at 4241-47 Iowa Ave.; cost \$11,000.

Mo., St. Louis.—Mrs. K. Scheuler will erect 2-story tenement-house at 4542 W. Papin St.; cost \$5000.

Mo., St. Louis.—Higley Bros. will erect 3-story tenement-house on McKee St. to cost \$15,000; construction by owner.

S. C., Charleston.—H. D. Schumacher & Son will erect apartment-house at 50-22 St. Philip St.; cost \$3900.

Okla., Tulsa.—W. H. Nicely will not erect apartment-house as lately reported.

Tenn., Knoxville.—B. H. Sprinkle is reported to erect apartment-house on Masonic court.

Tenn., Knoxville.—L. D. Tyson is having plans prepared for store and apartment-house. (See Stores.)

Tex., Houston.—Presley K. Ewing will erect apartment-house at 1109 Clay Ave.; frontage 50 ft.; 3 stories and basement; brick; steam heat; 12 suites.

Va., Richmond.—Chas. K. Willis will erect two 2-story brick tenements on Mulberry St. between Main St. and Floyd Ave.; cost \$12,800.

ASSOCIATION AND FRATERNAL

Fla., Tampa.—Ye Mystic Krewe of Gasparilla, J. T. Mahoney, Capt., is reported planning to erect convention hall to seat 20,000 to 30,000.

Mo., Cartersville.—Mrs. Mollie Miller, H. B. Sanders and Knights and Ladies of Security Lodge are reported to erect business and lodge building; 3 stories; brick; cost about \$15,000; construction to begin not later than Apr. 10.

Tex., Hallettsville.—Hallettsville Lodge, S. P. J. S. T., will erect hall and lodge building.

Tex., Houston.—Elks' Building Assn. organized with E. A. Hudson, Pres.; J. S. Rice, V.-P.; H. B. French, Secy.-Treas.; will erect lodge building for B. P. O. E.

Tex., Marfa.—A. F. and A. M. will erect temple; 2 stories; lower floor for stores; upper floor for lodgerooms and offices; cost \$12,000.

Tex., Texas City.—W. P. Suttle, McKinney, Tex., is reported to erect building with lodgerooms on second floor. (Lately noted under Tex., Galveston.)

BANK AND OFFICE

Fla., Clearwater.—Bank of Clearwater will erect 5-story bank building.

Fla., Pensacola.—State Board of Health, Jacksonville, receives plans and specifications until Apr. 15 for laboratory and office building. (See Government and State.)

Fla., Starke.—Bank of Starke is reported to expend \$4000 for improvements.

Ga., Ocilla.—J. A. J. Henderson, Prest. Ocilla Southern R. R. Co., is reported to rebuild office building burned at loss of several thousand dollars.

La., New Orleans.—Canal Bank & Trust Co. is reported to expend \$6000 to improve building at 217 Camp St.

La., Shreveport.—S. J. Marmaduke and Robt. H. Ward are reported to have plans prepared for office building; 2 stories; brick; cost \$50,000.

Mo., St. Joseph.—Kelsey Nursery Co. is reported to erect office building. (See Warehouses.)

Mo., St. Louis.—Louis Cella is having plans prepared by L. Baylor Pendleton, Central National Bank Bldg., St. Louis, for building on Grand Ave. near Olive St.; reported cost \$500,000; Mr. Pendleton wires Manufacturers Record: "Structure will be combination theater and office building; 144x200 ft.; office building, 10 stories; steel and concrete construction."

N. C., Asheville.—Carter & Brown have plans for office and store building lately noted. (See Stores.)

N. C., Dunn.—First National Bank of Dunn will erect building at Broad and Wilson Sts.; 4 stories; lower floor for bank; upper floors for offices.

N. C., Rocky Mount.—J. D. Douglas has plans for office and store building; bids opened Apr. 1. (See Stores.)

S. C., Beaufort.—Geo. E. Lafaye, Columbia, S. C., is preparing plans for bank building.

S. C., Yorkville.—Geo. E. Lafaye, Columbia, S. C., and N. C. Walker, Rock Hill, S. C., associate architects, are preparing plans for bank building.

Tenn., Chattanooga.—H. S. Probasco is having plans prepared by C. E. Bearden, Chattanooga, to remodel building at 734 Market St. to be occupied by American Trust & Banking Co.; rebuild front and exterior, convert into 2-story structure instead of 3, etc.; cost \$40,000.

Tenn., South Pittsburg.—First National Bank will enlarge bank building; install vault, tile floors, marble and steel fixtures for lobby and directors' room, heating plant, etc.

Tex., Houston.—Houston Real Estate Exchange, Minor Stewart, Chmn. of Comm., is reported to erect building; 8 to 10 stories; to contain offices, exposition hall, auditorium, etc.; cost about \$300,000. Mr. Stewart wires Manufacturers Record: "Nothing definite as yet."

Tex., Marfa.—A. F. and A. M. will erect store, lodge and office building. (See Association and Fraternal.)

Tex., San Antonio.—Alamo National Bank will erect 3 additional stories to building; reinforced concrete; brick facing; fireproof; also alter and reinforce walls of present structure, install elevators, remodel interior of banking-room, install fixtures in this portion, build vaults, provide marble wainscot, check tables and seats, tile floors and bronze grillwork; contract for banking-room improvements reported let to American Fixture Co., St. Joseph, Mo., at \$25,000; cost of other improvements \$60,000; Jas. Wahrenberger and Willard Simpson, Archts., San Antonio. (Lately noted.)

Va., Mears.—Bankers and Truckers' Bank, Albert F. Mears, Prest., will erect bank building; plans not made.

W. Va., Huntington.—Gwinn Bros. & Co. have plans for office building, etc., lately noted. (See Miscellaneous Enterprises.)

CHURCHES

Ark., Fort Smith.—First Lutheran Church receives bids through A. C. Chisholm, Archt., 801 Garrison Ave., Fort Smith, until Feb. 31 to erect Sunday-school building, gymnasium, etc.; cost \$15,000; brick; Carthage stone trimmings; 2 stories; 72x80 ft.; plans and specifications at office of architect and Aug. Reichert, 16 N. 5th St.; separate bids for plumbing, steam heating and electric wiring. (Lately noted.)

Ark., Russellville.—Cumberland Presbyterian Church will complete building; brick veneer; framework and roof completed. Address The Pastor.

Ark., Texarkana.—College Hill Methodist Church, Rev. Jesse Mitchell, pastor, plans to erect building.

Fla., Fort Meade.—Baptist church is reported to erect building and remodel present church for pastorium. Address The Pastor.

Fla., Kissimmee.—Presbyterian church is having plans prepared by R. H. Ludlam for improvements to building to cost \$5000.

Fla., Lakeland.—M. E. Church will expend \$6000 to erect Sunday-school annex on Kentucky Ave.; 55x63 ft.; fireproof; metal roof; A. J. Poteet, Archt., Lakeland. (Lately noted.)

Ga., Adel.—Methodist church, Rev. Chas. W. Curry, pastor, opens bids about Apr. 1 to erect building; 90x90 ft.; cost \$10,000; fireproof; slate roof; hot-air heat; electric lighting; architect not selected; address proposals to L. P. Booth. (Lately noted.)

Md., Baltimore.—St. Casimir's Catholic Church, Rev. Joseph Bok, pastor, Chesapeake and O'Donnell Sts., plans to erect building at Kenwood Ave. and O'Donnell St.; reported cost \$100,000; Bruno Wozny, Archt., Springfield, Mass.

Md., Elkton.—Methodist Episcopal Church at Summit Bridge is erecting building. Address The Pastor.

Md., Cumberland.—Melvin Methodist Protestant Church, Rev. W. M. Snyder, pastor, is reported to erect building at Reynolds and East Sts.; cost \$7000; C. H. Sturtz, G. H. Golden, Thos. McCoy and others, building committee.

Md., Upper Cross-Roads.—Providence Methodist Protestant Church is reported to remodel building at cost of several thousand dollars. Address The Pastor.

Miss., Mark.—Baptist church has plans by J. E. Greene, 1906 American Trust Bldg., Birmingham, Ala., for building to cost \$8000.

Miss., Meridian.—Forty-first Avenue Baptist Church has plans by J. E. Greene, 1906 American Trust Bldg., Birmingham, Ala., for building to cost about \$10,000. (Lately noted.)

Mo., Cape Girardeau.—Centenary M. E. Church, E. W. Flentge, Chmn. of Building Comm., will rebuild structure; 70x110 ft.; cost \$30,000; fireproof; asbestos shingle roof; heating not determined; electric lighting; architect not selected. (Lately reported damaged by fire.)

N. C., Oak Ridge.—Methodist Protestant church will rebuild structure previously noted burned. Address The Pastor.

N. C., Wilmington.—Trinity M. E. Church, Rev. W. L. Rexford, pastor, 8 N. 9th St., will erect building; cost \$15,000; ordinary construction; hot-air heat; electric lighting; bids opened in April. (Lately reported.)

S. C., Columbia.—Second Baptist Church will let contract Feb. 29 to erect building; cost \$40,000; J. M. McMichael, Archt., Charlotte, N. C. (Previously described.)

S. C., Georgetown.—Baptist Church, Rev. Hasford B. Jones, pastor, is having plans prepared by L. A. Bellonby, Charlotte, N. C., for building to seat 1000.

Tenn., Jackson.—First Presbyterian Church completed building lately reported to be erected.

Tenn., Paris.—Presbyterian Church is reported to erect building. Address The Pastor.

Tex., Austin.—Oakwood Cemetery Assn. has plans by C. H. Page & Bro., Austin, for chapel; stone exterior; brick interior.

Tex., Dallas.—St. James' A. M. E. Church, Rev. J. E. Edwards, pastor, 317 Duncan St., has plans by McKissack & McKissack, 1800½ Jackson St.; bids opened.

Tex., Jacksboro.—Presbyterian church, Hampden Spiller, Secy. of Building Comm., will erect building. (Lately reported.)

Tex., Kilgore.—M. E. Church South, Rev. A. J. McCary, pastor, opens bids about Apr. 1 to erect building; 60x65 ft.; main auditorium 40x40 ft.; cost \$4000; ordinary construction; roofing not determined; electric lighting; lately noted. (See Machinery Wanted.)

Tex., Pleasanton.—Christian church will erect building. Address The Pastor.

Tex., Tenaha.—First Baptist Church will erect \$5000 building. Address The Pastor.

Va., Clarendon.—First Baptist Church, B. P. Hough, Chmn. of Building Comm., will erect building; 78x81 ft.; 24 rooms; asbestos roof; steam heat; electric lighting; J. E. Green, Archt., 1906 American Trust Bldg., Birmingham, Ala. (Lately noted.)

Va., Roanoke.—Christ Protestant Episcopal Church, G. Otis Mead, rector, 210 Church Ave., will erect building; plans not made. (Lately noted.)

W. Va., Moundsville.—Calvary Methodist Episcopal Church is reported to erect building. Address The Pastor.

CITY AND COUNTY

Ala., Talladega.—Jail.—Talladega county receives bids through J. E. Camp, Probate Judge, until Apr. 13 to remodel jail; plans and specifications at office of Harry B. Wheelock, Archt., Birmingham.

La., New Orleans.—Library.—Directors of New Orleans Public Library accepted plans by W. R. Burk, New Orleans, for library on Phillip St.; 1 story; brick; Bedford limestone trimmings; fireproof; cost \$20,000; construction under supervision of architect.

La., Rayville.—Jail.—Richland Parish Police Jury opens bids Apr. 13 to erect jail; cost \$10,000; Fayrot & Livaudais, Archts., Poyrin Bldg., New Orleans, La. (Lately noted to call for bids until Feb. 25.)

Md., Baltimore.—Health Department.—Board of Awards will alter old Polytechnic Institute building for Health Department; contractors estimating are Singer-Pentz Co., 900 Equitable Bldg.; J. L. Robinson Construction Co., Knickerbocker Bldg.; Fred Decker & Son, 1209-11 E. Biddle St.; Chas. Herbold & Son, 2768 W. North Ave.; Chas. Stockhausen, National Marine Bank Bldg.; L. Schoenlein & Sons, 2217 E. Baltimore St., all of Baltimore; bids opened Feb. 18. (Lately noted.)

Miss., McComb.—City Hall.—D. C. Lenoir and T. R. Ratliff, Comm., will recommend to City Council Apr. 7 to erect city hall on Broadway and 3d St.; 55x100 ft.; cost \$25,000. (Lately noted.)

Mo., Cartersville.—City Hall.—City is reported considering voting Apr. 7 on bonds to erect city hall. Address The Mayor. (See Schools.)

Mo., Excelsior Springs—Library.—City will erect library; ordinary construction; architect not selected; cost \$10,000. Address The Mayor.

Mo., Kirkwood—City Hall and Jail.—City votes Apr. 7 on \$15,000 bonds for city hall and jail; J. R. Matthews, Mayor. (Lately noted.)

S. C., Chester—Jail.—Chester county has plans by A. W. Hamby, Columbia, S. C., for jail; cost \$20,000. (Lately noted.)

S. C., Sumter—Jail.—J. H. Johnson, Sumter, is preparing plans for jail to cost \$30,000. (City previously noted to erect jail.)

Tenn., Chattanooga—Market.—Board of Comms. appropriated \$5000 to remodel police station for market-house.

Tenn., Memphis—Jail.—Shelby County Jail Com. is reported to submit plans and specifications for jail to County Court in April for approval; \$325,000 bonds authorized.

Tenn., Nashville.—Fire Station.—Fire Dept., J. D. Alexander, Commr., has plans by Jas. H. Yeaman, City Hall Bldg., Nashville, for fire station at 16th St. and Chadwell Ave.; 2 stories; 50x60 ft.; brick; slate roof; cost (without mechanical equipment) \$7500; fireproof; steam heat; gas and electric lighting; concrete sidewalks; bids opened Mch. 17; contracts let separately. (Lately noted.)

Tex., Houston—Jail.—Harris county, H. L. Washburn, County Auditor, receives bids until Mch. 23 for general work, cell work and plumbing for insane quarters at county jail; plans and specifications at office of Mr. Washburn and O. J. Lorch, Archt., Houston.

Tex., Waco—City Hall.—City opened bids to remodel and install heating plant in city hall. A. Alford is lowest bidder at \$3650 for former and Oscar Myre at \$4755 for latter.

COURTHOUSES

Fla., Miami.—Dade County Comms. deferred indefinitely erection of courthouse. (Previously noted.)

Md., Elkton.—Cecil County Comms. are reported considering erecting \$100,000 courthouse.

Md., Prince Frederick.—Calvert County Comms. are considering \$25,000 bond issue to erect courthouse.

DWELLINGS

Ala., Birmingham.—W. G. Oliver will erect 18 one-story frame residences on Ave. H; cost \$6300.

Ala., Dothan.—A. C. Pace has plans by C. Frank Gallher, 425 Bell Bldg., Montgomery, for dwelling; tapestry brick; cost \$6000.

Ark., Little Rock.—Guy W. Caron will erect 4 one-story bungalows; cost \$6900.

Fla., Coconut Grove.—V. W. Helm of Everglades Land & Sugar Co. will erect residence at New Venice; 77x48 ft.; 2 stories; hollow tile; red tile roof; cost \$10,000, exclusive of furnishings.

Fla., Fort Meade.—Baptist church will remodel present church for parsonage. (See Churches.)

Fla., Fort Meade.—Methodist church, Rev. J. L. Kilgore, pastor, will erect parsonage.

Fla., Fort Pierce.—H. J. Henry will erect bungalow.

Fla., Jacksonville.—Mrs. C. C. Morrison will erect residence on Ashley St.; 2 stories; frame; cost \$4000.

Fla., Lakeland.—Protestant Episcopal Church will let contract soon to erect rectory on Massachusetts Ave. and Lemon St.

Fla., Lakeland.—J. W. Buchanan, Jr., has plans by J. P. Streater for bungalow on Lime St.

Fla., Miami.—W. A. Pickert will erect 3 dwellings on Ocean Beach; plans for first structure prepared by August Geiger, Miami, call for building 46x28 ft.; concrete; stucco exterior; tile trimmings; shower baths; cost \$1500.

Fla., Seffner.—Dr. C. A. Graves will erect residence.

Ga., Albany.—D. H. Redfearn will erect bungalow; frame; cost \$3500; M. J. Reidy, Archt., Albany.

Ga., Atlanta.—H. W. Dillon will erect \$3275 residence; day labor.

Ga., Atlanta.—McD. Baldwin will erect \$3500 residence; day labor.

Ga., Atlanta.—Edgar Morris will erect \$4500 residence; day labor.

Ga., Atlanta.—W. H. Wynne will erect dwelling at 215 St. Charles St.; 8 rooms; cost \$6000; ordinary construction; shingle roof; steam heat; electric lighting. (Wynne & Mackle lately noted to erect residence.)

Ga., Atlanta.—Mrs. J. S. Matson, it is reported, has plans by DeFord Smith, Atlanta, for residence in Arkins Park; cost \$15,000.

Ga., Atlanta.—Chas. Smith is erecting residence on Fairview Rd.

Ga., Atlanta.—Jno. N. Malone will erect \$15,000 residence.

Ga., Augusta.—Mrs. H. C. Parker will erect 2-story residence; cost \$3000.

Ga., Thomasville.—F. Y. Speight contemplates erecting residence.

Ga., Tifton.—Dr. Jasper L. Brooks is reported considering plans to erect residence.

Ga., Tifton.—Williamham Tift is reported considering erecting residences.

Ky., Louisville.—Chas. Fritschner will erect brick dwelling at 1705 Windsor Pl.; cost \$6500.

Ky., Louisville.—L. Jacobson is reported to erect 50 bungalows in Dulancy Pl.; cost \$2500 to \$2700 each.

Ky., Louisville.—C. R. Boswell will erect 2 frame cottages on S. 32d St.; cost \$3000.

Ky., Louisville.—Annie E. Allen will erect frame dwelling at 2148 Alta Ave.; cost \$2500.

La., New Orleans.—E. Blattmann has about completed residence lately noted.

La., New Orleans.—A. C. Miller will erect 1-story frame residence at 2403 Octavia St.; cost \$4200.

La., Roseland.—T. E. Hill, New Orleans, La., is reported to erect residence.

Md., Baltimore.—John J. Carlin, 215 St. Paul St., will erect 9 two-story brick dwellings at Shirley and Cottage Aves.; 22x39 ft.; cost \$6000.

Md., Baltimore.—Henry Rapp will erect 10 two-story brick residences at 1532-50 Latrobe Park Terrace; 13x43 ft.; cost \$10,000; J. E. Laferty, Archt., 11 E. Pleasant St., Baltimore.

Md., Baltimore.—A. Warren Edwards will erect 10 2-story brick dwellings on Falls Rd. near Merryman's Ave.; slag roofs; hot-air heat; cost \$14,000; S. Russell, Archt., 2903 Clifton Ave., Baltimore.

Md., Baltimore.—Joseph L. White Realty Co. will erect number of dwellings at Potomac and McElderry Sts. on site 168.6x365 ft.

Md., Baltimore.—Frank Novak, 744 N. Kenwood Ave., acquired tract on Harford Rd. near Ready Ave. and will erect 2-story dwellings.

Md., Baltimore.—John E. Greiner, 1308 Fidelity Bldg., receives bids until Mch. 26 to erect residence at Guilford; contractors estimating are Roland Park Co., Munsey Bldg., Baltimore, and Roland Park, Md.; G. Walter Tovell, Eutaw and Dolphin Sts.; Cowan Building Co., 106 W. Madison St.; Willard E. Harn Co., 106 W. Madison St.; Gladfelter & Chambers, 2074 Woodberry Ave., all of Baltimore; Elliott & Emmart, Archts., Union Trust Bldg., Baltimore.

Md., Baltimore.—Joseph Castelberg, 2426 Eutaw Pl., is having plans prepared by Warren & Wetmore, 16 E. 47th St., New York, for residence; fireproof; entrance portico of white marble columns; theater and ballroom on roof floor, surrounded by tile promenade inclosed by classic marble balustrade with marble figures on pedestals; seats for 150; entire roof floor inclosed in glass and convertible into open-air roof garden; automatic electric elevator; heating and ventilating plant in garage in rear; conservatory full length of house; shower and needle baths, swimming pool, gymnasium, etc.; reported cost \$100,000.

Md., East New Market.—Oliver W. Hubbard will rebuild residence; 28x56 ft.; cost \$5000; mill construction; slate roof; hot-water heat to cost \$600; electric lighting; construction about May 1. (Lately reported damaged by fire.)

Miss., Greenwood.—W. M. Whittington has plans by Bem Price, 518 Empire Bldg., Birmingham, Ala., for residence; 56x42 ft.; 2 stories and basement; brick veneer; green tile roof; hot-water heat; conduit wiring; open bids in about 30 days.

Mo., Kansas City.—F. G. Endelman and C. J. Bayne are reported to have acquired 20 lots in Afton Addition and to erect 4 or 5-room bungalows.

Mo., Kansas City.—P. Donnell will erect brick and stone rooming-house at 512-14 Harrison St.; cost \$6000.

Mo., Kansas City.—J. C. Grover will erect brick and hollow-tile residence at 5434 Campbell St.; cost \$5000.

Mo., Kansas City.—D. A. Harrington will erect stucco veneer dwelling at 917 Cleveland St.; cost \$3000.

Mo., Kansas City.—C. E. Closser will erect stucco veneer dwelling at 5930 McGee St.; cost \$4000.

Mo., Kansas City.—Blue Valley Home Building Co. will erect 4 frame dwellings on Lee St.; cost \$7000.

Mo., Kansas City.—H. V. Herring will erect

2 frame dwellings at 3720-22 S. Benton St.; cost \$3000.

Mo., St. Louis.—Richard Pendegast will erect residence on Maple Ave.

Mo., St. Louis.—J. Levy acquired site 50x150 ft. on Maffitt Ave. and will erect cottages.

Mo., St. Louis.—Rudolph Gull will erect \$15,000 residence.

Mo., St. Louis.—Lindell Fairground Real Estate & Investment Co. will erect store and dwelling. (See Stores.)

Mo., St. Louis.—Albert M. Ahern, V.P. of Funsten Bros. & Co., will erect colonial residence.

Mo., St. Louis.—Geo. Meyricks will erect store and dwelling. (See Stores.)

Mo., St. Louis.—J. J. McClelland is reported to erect bungalow in Meridian, St. Louis county.

Mo., St. Louis.—Louisa Sharkey will erect 2-story store and dwelling and 1-story stable at 2831 Union St.; cost \$6500.

Mo., St. Louis.—Sylvester G. Lewis will erect 7 California bungalows and 1 flat on Greer Ave.; bungalows red stock matt and buff brick; stone trimmings; rubblestone porches with tile floors; 6 rooms and sun parlor; beamed ceiling in dining-room; total cost \$40,000.

N. C., Durham.—Durham Hosiery Mill Co. will erect 15 employees' dwellings costing \$500 to \$1000 each; let contract. (See Textile Mills.)

N. C., Hendersonville.—W. M. Bacon opens bids Mch. 25 to erect dwelling; 10 rooms; cost \$5000; asbestos or slate roof; hot-water heat; architect not selected; construction by Apr. 10; lately noted. (See Machinery Wanted.)

N. C., Lumberton.—F. J. Thomas will erect residence.

N. C., Lumberton.—R. D. Caldwell will erect residence; brick.

N. C., Rocky Mount.—L. F. Tillery is reported to erect 4 bungalows.

S. C., Camden.—E. C. Stokes will erect 8-room residence on Mill St.

S. C., Charleston.—J. H. Lamb will erect dwelling at 175 Huger St.; cost \$3500.

S. C., Edgefield.—Mrs. Kate Lynch will rebuild dwelling; 8 rooms; tin roof; electric lights to cost \$50; cost \$3000. (Lately reported damaged by fire.)

Tenn., Martin.—City Lumber Co. will rebuild residence occupied by T. C. Wood; cost \$2500; fireproof; metal roof; steam heat to cost \$100; lighting to cost \$100; concrete sidewalks to cost \$50. (Lately reported damaged by fire.)

Tenn., Memphis.—G. W. Ransom, 1112 Forest Ave., will erect 5 dwellings; 10 rooms; cost \$6000; hot-air heat to cost \$100; plans and construction by owner. (Lately noted.)

Tex., Dallas.—W. H. Goodnight will erect 10-room 2-story frame residence at 118 S. Edgefield Ave.; cost \$4500.

Tex., Dallas.—M. T. Hawthorne will erect 2-story 8-room frame residence at 4938 Swiss St.; cost \$5000.

Tex., Dallas.—C. F. Freeman will erect 3 five-room frame cottages on Birmingham St.; cost \$4950.

Tex., Dallas.—J. B. King will erect 2-story 9-room frame residence at 710 W. 12th St.; cost \$3000.

Tex., Edna.—J. W. Brickel will erect residence.

Tex., Edna.—L. C. Wilkerson will erect residence.

Tex., El Paso.—J. E. Neff will erect brick bungalow; cost \$3000.

Tex., El Paso.—V. E. Ware will erect brick residence at Prospect and Montezuma Sts.; cost \$3000.

Tex., Houston.—Russell Brown Co. will erect 2-story residence at Stratford and Aerial Sts.; cost \$6500.

Tex., Houston.—S. L. Jacobs will erect 6-room residence on Saschal St.; cost \$3000.

Tex., San Antonio.—Mrs. Clara Myrick will erect addition to dwelling on Matamoros St.; cost \$6000.

Tex., Texas City.—H. W. Hildebrand will erect 5 bungalows on 1st Ave. (Lately noted under Tex., Galveston.)

Tex., Texas City.—L. H. Newman will erect residence. (Lately noted under Tex., Galveston.)

Tex., Waco.—Roy E. Lane, Archt., Peerless Bldg., Waco, receives bids until Mch. 23 to erect residence for L. A. Brooks.

Va., Graham.—A. B. Giliardi will erect dwelling on Highland Ave.

Va., Pocahontas.—John Roberts, Chas. E. Stump and others have plans by E. V. Garrett, Pocahontas, for several dwellings.

Va., Petersburg.—Harvey Seward has plans by Carneal & Johnston, Chamber of Commerce Bldg., Richmond, Va., for dwelling.

Va., Richmond.—B. H. Melton will erect nine 1-story frame dwellings on Chaffin St.; cost \$2500.

Va., Richmond.—Chas. L. Loehr will erect 4 two-story frame residences on Hill St.; cost \$3750.

Va., Richmond.—R. S. Gilman will erect 2 two-story brick dwelling on Cary St.; cost \$4000.

Va., Richmond.—Louis Salsbury will erect two-story brick dwelling on Cary St.; cost \$4000.

Va., Richmond.—T. E. McCracken, 3321 Hanover Ave., has plans by Marcus Hallett, 1203 Mutual Bldg., Richmond, for dwelling; 25x45 ft.; cost \$4750; ordinary construction; 5-ply slag roof; hot-water heat to cost \$400; construction by owner. (Lately noted.)

GOVERNMENT AND STATE

D. C., Washington.—Hospital.—Elliott Woods, Supt. of Capitol Building and Grounds, opened bids to erect building for Columbia Hospital for Women and Lying-in Asylum at Pennsylvania Ave., 24th and 25th Sts. N. W.; Geo. Wyne, 327 Munsey Bldg., Washington, is lowest bidder at \$242,900; Nathan C. Wyeth, Archt., 1517 H St. N. W., Washington. (Lately noted.)

Fla., Pensacola.—Laboratory.—State Board of Health, Jacksonville, receives plans and specifications until Apr. 15 for laboratory and office building; concrete and brick; colonial style; cost not to exceed \$15,000; further information from State Health Officer, Jacksonville, and Dr. S. R. Mallory, Pensacola. (Lately noted.)

Ga., Savannah.—Quarantine Station.—Custodian of U. S. Quarantine Station opened bids for miscellaneous repairs to station; David Rower, Savannah, is lowest bidder at \$3150.

La., Jackson.—Hospital.—Administrators of East Louisiana Hospital for the Insane are reported to erect Tilton Memorial building; cost \$57,000.

Mo., DeSoto.—Postoffice.—Treasury Dept., Oscar Wenderoth, Supvr. Archt., Washington, opened bids to erect postoffice building; Hiram Lloyd Building & Construction Co., St. Louis, is lowest bidder at \$49,600; 2 stories and basement; 3940 sq. ft. ground area; brick facing; stone portico and cornice; composition roof; fireproof, except attic and roof. (Lately noted.)

HOTELS

Fla., Belleair.—Morton F. Plant, Groton, Conn., has plans by F. J. Kennard, Tampa, Fla., for addition to tourist hotel; 50x185 ft.; 5 stories; erect ballroom and 50 additional rooms to servants' building and enlarge steam laundry building; ordinary construction; shingle roof; steam heat; electric lighting; plans not completed; construction probably in April or May. (Contract lately noted let.)

Fla., Clearwater.—Jeffords & Smoyer purchased Austin Kimball home and will remodel as tourist hotel; erect 100-room addition.

Fla., Lakeland.—Hotel Kibler is having plans prepared by Louis Fort for annex to building; 3 stories; reinforced concrete and brick.

Fla., Miami.—J. H. Havlin, Havlin Hotel, Cincinnati, O., is reported to erect store and hotel building. (See Stores.)

Fla., St. Petersburg.—St. Petersburg Victualling Co. is reported to erect hotel; 4 stories; brick; 40x100 ft.; 50 rooms.

La., Shreveport.—Ricon estate is reported having plans prepared by Ed. F. Neild, Continental Bank Bldg., Shreveport, for hotel building; 6 stories; brick; 110 rooms; investment \$150,000; C. F. Long of Caddo Hotel, Shreveport, will be manager.

N. C., Waynesville.—E. A. Cole, Charlotte, Rev. W. L. Womble, Hendersonville, N. C.; A. C. Reynolds, Cullowee, N. C., and others are reported as committee to promote company to erect hotel on Southern Methodist Assembly grounds at Lake Junaluska; plans adopted for 3-story structure; 75 rooms, about half of which will have private baths; more than 400 ft. of verandas; lobby 60x30 ft., arranged in semi-circle with glass front facing lake; cost, including site, \$30,000.

S. C., Aiken.—Geo. E. Lafaye, Columbia, S. C., is preparing plans for hotel to cost \$50,000.

Tex., Cuero.—Hotel Butler opens bids May 1 to erect 3-story addition to fireproof hotel; 35x90 ft.; cost \$5000. (Lately noted.)

Tex., Galveston.—W. B. Munson, Denison, Tex., is reported having plans for store and hotel building. (See Stores.)

Va., Petersburg.—Petersburg Investment Corp., W. C. Jackson, Prest., will erect 7-story hotel on W. Tabb St.; fireproof; cost \$125,000 to \$150,000; construction probably by June 1. (Chamber of Commerce lately noted promoting erection of hotel on W. Tabb St.)

Va., Pocahontas.—Plans and specifications on file until Mch. 23 at office of Earle V. Garrett, Archt., Pocahontas, for brick business addition to Pocahontas Inn property.

MISCELLANEOUS

Fla., Coconut Grove.—Clubhouse.—Coconut Grove Country Club, organized by A. A. Boggs, Ben Johnson, W. C. DeGarmo and others, is reported to erect clubhouse with 9-hole golf course, tennis courts, etc.

La., New Orleans.—Hospital.—Charity Hospital will expend \$15,000 to renovate plumbing system at hospital; install bathroom equipment, etc.; Favrot & Livaudais, architects, Perrin Bldg., New Orleans. (Lately noted to receive bids until Mch. 31.)

Md., Baltimore.—Nursery.—St. Martin's Day Nursery, Fayette and Payson Sts., is having plans prepared by Geo. R. Callis, Jr., Knickerbocker Bldg., Baltimore, for addition; 2 stories; 30x70 ft.; brick and steel; also enlarge dining-room.

Mo., Kirkwood.—Clubhouse.—Kirkwood Country Club organized by John K. Broderick, Geo. D. Cooney, Jas. Dawson and others; will erect clubhouse; 1 story; stucco; 100x50 ft.; inclosed veranda, sunroom, etc.

N. C., Asheville.—Hospital.—New Mission Hospital has plans by W. H. Lord, Asheville, for hospital; cost \$50,000; fireproof.

S. C., Spartanburg.—Hospital.—Steady Hospital will erect building; 4 stories and basement; site 120x40 ft.; cost \$65,000; construction to begin about May 15; completion about Nov. 15.

Tex., Austin.—Chapel.—Oakwood Cemetery Assn. has plans for chapel. (See Churches.)

Tex., Houston.—Sanitarium.—Baptist Sanitarium will erect addition; plans in progress.

Tex., Houston.—Exposition Hall, etc.—Houston Real Estate Exchange is reported to erect building to contain exposition hall, etc. (See Bank and Office.)

Tex., Richmond.—Market.—Bryant & Daniels are reported to erect brick market building.

W. Va., Fairmont.—Restaurant.—Wm. R. Riggs has plans by A. C. Lyon to rebuild restaurant on Loree St.; 2 stories; 65x29 ft.; kitchen 18x18 ft.; cost \$3000; lumber; tin roof; gas heating to cost \$200; electric lighting to cost \$50. (Lately reported damaged by fire.)

RAILWAY STATIONS, SHEDS, ETC.

Ark., Brinkley.—Rock Island Lines, C. A. Morse, Ch. Engr., Chicago, Ill., will repair depot; construction by company's force. (Lately reported damaged by fire.)

Ga., Ocala.—J. A. J. Henderson, Prest. Ocala Southern R. R. Co., is reported to rebuild offices. (See Bank and Office.)

La., Baton Rouge.—Louisiana Ry. & Navigation Co., Wm. Edenborn, Prest., New Orleans, is reported to erect brick passenger station to replace structure reported burned at loss of \$9000.

N. C., Hillgirt.—Southern Ry., B. Herman, Ch. Engr., 1300 Pennsylvania Ave., Washington, D. C., will erect passenger station; frame; tile roof; covered platform; landing will be erected; bids asked.

S. C., Columbia.—Southern Ry., B. Herman, Ch. Engr., 1300 Pennsylvania Ave., Washington, D. C., is reported to expend \$40,000 to \$100,000 to improve Union Station; enlarge waiting-rooms, construct viaducts over tracks with gates leading to each, etc.

Tenn., Pruden.—Southern Ry., B. Herman, Ch. Engr., 1300 Pennsylvania Ave., N. W., Washington, D. C., is reported to erect frame depot.

Tex., Dallas.—Southern Traction Co., O. Goodwin, V.-P., is reported to erect transfer station and passenger depot at Comal St. and Jefferson Ave.; ornamental brick.

SCHOOLS

Ala., Birmingham.—Howard College will erect gymnasium; brick and stone; basketball court, track, swimming pool, etc.; cost \$20,000. Address W. A. Berry, Jefferson County Bldg., Birmingham.

Ala., University.—University of Alabama will erect dormitory for women; colonial style; brick; steam heat; electric lights; first unit to contain reception-room, dining-room to seat 150 and dormitory facilities for at least 54 women. (Previously noted.)

Fla., Avon Park.—City will erect \$16,000 school building. Address The Mayor.

Fla., Daytona.—City will vote on \$50,000 bonds for schools. Address The Mayor. (Lately noted.)

Fla., Miami.—Miami School Dist. voted \$150,000 bonds for schools, to include erection of high school, 3 stories and basement, accommodations for 400 to 500 pupils; addition to 2d St. school, erection of schools in Southside, Highland Park or Riverside, Buena Vista, Allapattah and Orange Glade; R. E. Hall, Box 458, Supt. of Public Instruction of Miami Dist. (Lately noted.)

Fla., Palatka.—School Board engaged Wm. A. Edwards, Atlanta, Ga., to prepare plans for primary, grammar and high school buildings to accommodate 800 pupils; also school in East Palatka for 100 children, and remodel building No. 2; cost \$100,000.

Fla., Tampa.—College Hill Special Tax School Dist. Trustees have plans by Willis R. Biggers, Tampa, for proposed school; 7 rooms and auditorium; gravity ventilating system; face of clay brick; red tile roof.

Ga., Chickamauga.—Chickamauga School Dist. voted \$15,000 bonds for schools. Address Dist. School Trustees. (Lately noted.)

Ga., Lagrange.—Board of Education has plans by Chas. W. Carlton, Lagrange, for high school; 150x52 ft.; 2 stories and basement; cost \$40,000; ordinary brick construction; pitch and gravel roof; indirect steam heat and mechanical ventilation; plans ready in about 30 days. (Previously noted.)

Ga., Locust Grove.—Locust Grove Institute will rebuild dormitory; plans not made. (Lately reported damaged by fire.)

Ky., Corbin.—Sisters of Divine Providence are reported to erect proposed St. Camillus Academy, to include administration building, boys' hall, girls' hall and gymnasium; cost about \$50,000.

Ky., Cynthiana.—City is considering \$15,000 bond issue to erect school. Address The Mayor.

Ky., Elizabethtown.—Elizabethtown Graded School Dist. will vote Mch. 23 on bonds to erect school to cost \$20,000 to \$25,000. Address Dist. School Trustees.

Ky., Hindman.—Hindman Settlement Mission School is reported to erect building to cost about \$20,000.

La., Alexandria.—Alexandria School Dist. voted \$125,000 bonds to erect high school according to plans by Favrot & Livaudais, New Orleans; also erect and equip schools in Portland Dist. and Tioga Dist. Address Dist. School Trustees. (Lately noted.)

La., Monroe.—Parish Board of School Directors voted tax to erect school to cost \$20,000. (Lately noted.)

La., New Orleans.—City has plans by E. A. Christy, New Orleans, for proposed school in Gentilly Ter.; 1 story and basement; frame; stucco-covered exterior; hot-water heat; Swiss craftsman type; green tile roof.

Md., Baltimore.—Board of Awards, Jas. H. Preston, Prest., receives bids until Mch. 26 at office of Richard Gwyn, City Register, City Hall, to repair school building at Eden and Preston Sts. noted burned at loss of \$4000; plans and specifications at office of Clarence E. Stubbs, Inspector of Buildings, City Hall.

Mo., Carterville.—City will vote Apr. 7 on \$20,000 bonds; \$10,000 to erect 6-room ward building in northern section and \$10,000 for addition to North Heights school; also reported considering voting bonds to erect city hall. Address The Mayor.

Mo., Clayton.—City defeated \$75,000 school bonds. (Lately noted.)

Mo., Keytesville.—Keytesville School Dist. voted \$15,000 bonds to erect school. Address Dist. School Trustees.

Md., Thurmont.—City is considering \$36,000 bond issue to erect school. Address The Mayor.

Miss., Hickory.—City will issue \$10,000 of bonds to erect school building; construction about June 1. Address The Mayor.

Mo., Cairo.—Cairo School Dist. voted \$5000 bonds to erect school. Address Dist. School Trustees.

Mo., Cassville.—Cassville School Dist. voted \$13,250 to erect school. Address Dist. School Trustees. (Lately noted.)

Mo., Mountain Grove.—City voted \$15,000 bonds to improve high school. Address The Mayor.

Mo., St. Louis.—Model Ladies' Tailoring College Co., \$50,000 capital, Incptd. by Jos. A. Weidel, Amos T. Greenfield and others.

N. C., Charlotte.—City voted tax for school improvements. Address The Mayor. (Lately noted.)

N. C., Greensboro.—City Commrs. are considering \$50,000 bond issue to include \$25,000 for schools and establishment of public playground.

N. C., Spray.—City voted \$20,000 tax for graded schools. Address The Mayor. (Lately noted.)

Tenn., Camden.—City votes Mch. 24 on bonds to erect school building on W. Main St.; 2 stories; 10 or 12 rooms; cost \$18,000; details not determined; architect not selected. Address G. B. Halladay. (Lately noted.)

Tenn., Nashville.—George Peabody College for Teachers will probably let contract to Hedden Construction Co., 1 Madison Ave., New York, to erect building (probably psychology building) on percentage basis; 66x100 ft.; 2 stories and basement; cost \$65,000; fireproof; tin roof; steam heat and electric lighting supplies from central plant; hand-lift elevator; Ludlow & Peabody, Archts., 101 Park Ave., New York; construction will begin about May 10 on social-religious building to cost \$300,000 previously mentioned.

Tex., Dallas.—City will expend \$75,000 to erect 16-room building on Gano St.; fireproof; composition roof; mechanical heating plant; electric wiring to cost \$750; Wm. F. Nicol, Archt., Dallas. (Lately noted.)

Tex., Dallas.—St. Mary's College, Bishop A. C. Garrett, Prest., opens bids in May or June to erect school at Garrett and Ross Aves.; 50x100 ft.; 2 stories and basement; cost \$20,000; brick; metal or slate roof; steam heat; Hubbell & Greene, Archts., Dallas, who may be addressed. (Lately noted.)

Tex., El Paso.—City will vote Apr. 14 on \$200,000 bonds to erect high school and make other school improvements; Trost & Trost, Archts., El Paso; C. E. Kelly, Mayor. (Previously noted.)

Tex., Galveston.—Regents of University of Texas have plans by Crow, Lewis & Wickenhoefer, 200 5th Ave., New York, for 2 buildings for State Medical College, to include \$65,000 nurses' home and women's building in connection with John Sealy Hospital; former 3 stories, with accommodations for 100 nurses; bids reported to be opened Mch. 23. (Lately noted.)

Tex., Gatesville.—Roy E. Lane, Archt., Peerless Bldg., Waco, receives bids until Mch. 28 to erect fireproof dormitory building at State Juvenile Training School. (Lately noted.)

Tex., Houston.—City, Ben Campbell, Mayor, is reported to erect addition to Lubbock School; 4 or 8 rooms; cost \$14,000 or \$30,000.

Tex., Jacksonville.—Alexander Collegiate Institute, M. L. Leffer, Prest., is reported to rebuild structure lately noted burned; cost about \$30,000.

Tex., Whitewright.—W. F. Holland receives bids until Mch. 23 to erect school; 2 stories and basement; plans and specifications at office of T. J. and J. C. Galbraith, Archts., Hillsboro, Tex., and Chickasha, Okla.

Va., Hollins.—Hollins College, Miss Mittie L. Cooke, Prest., will erect science hall; cost \$30,000.

Va., Norfolk.—School Board will erect school building in former Ninth Ward; soon call for bids.

W. Va., Follansbee.—Cross Dist. voted \$20,000 bonds and will erect school. Address Dist. School Trustees.

W. Va., Huntington.—Board of Education employed Versus T. Ritter, Ritter Bldg., Huntington, as architect for school improvements provided in recent bond issue; includes high school to cost \$300,000, several grade buildings and remodeling number of other schools. (Lately noted to have voted \$500,000 bonds for schools.)

STORES

Ala., Attalla.—Pettit Mercantile Co., E. D. Pettit, Mgr., is reported to erect building to replace burned structure.

Ala., Birmingham.—Sam Earle and others have plans by Miller & Martin, Birmingham, for proposed building on 1st Ave. between 19th and 20th Sts.; 5 stories and basement; reinforced concrete; 50x140 ft.; terra-cotta front; cost \$65,000.

Ala., Birmingham.—James Hood of Hood & Wheeler Furniture Co. is reported having plans prepared by Harry B. Wheelock, Birmingham, for store building on 4th Ave.; 6 stories; 50x140 ft.; reinforced concrete and steel; fireproof; cost \$65,000 to \$75,000.

Ala., Girard.—W. M. Becker, Columbus, Ga., is reported to erect brick store building.

Fla., Miami.—J. H. Havlin, Havlin Hotel, Cincinnati, O., is reported to erect building at Ave. D and 14th St.; 3 stories; foundation to support 3 additional stories; exte-

rior of stucco and tapestry brick; reinforced columns; hollow-tile curtain walls; steel girders; solid plate-glass fronts on 2 sides; 70x124 ft.; 25,000 sq. ft. floor space; 6 stores on first floor; 2 upper floors to contain 48 hotel rooms with private baths; elevator; Walter C. DeGarmo, Archt., Miami. (Lately noted.)

Fla., Miami.—W. S. Witham will not erect stores as lately reported.

Ga., Albany.—Sam Farkas is reported considering erecting building at Broad and Jackson Sts.; 2 or 3 stories.

Ga., Columbus.—Jas. A. Lewis is reported to erect business building on 12th St.

Ga., Milledgeville.—J. N. Carter Co. will erect store building; 60x160 ft.; 2 Ls.; 2 stories and mezzanine; reinforced concrete; face brick; fireproof; plate glass; waterproofing; cinder-filled roof with cement finish; cost \$44,000; M. J. Reidy, Archt., Albany, Ga.

Ga., Morgan.—S. N. McGuirt will erect brick store building to replace burned structure.

La., Alexandria.—Favrot & Livaudais, Perrin Bldg., New Orleans, La., prepared plans for store building to cost \$50,000; bids opened.

La., Ponchatoula.—J. R. Abels is reported to erect 5 brick business buildings on Pine St.

Md., Frederick.—Frederick Trust Co. opens bids about Apr. 1 to erect addition to building for store and apartments; 33x50 ft. and 32x80 ft.; cost \$15,000; ordinary construction; slag and gravel roof; steam heat to cost \$1200; interior wiring; Emory C. Crum, Archt., Frederick; heating, lighting and plumbing separate contracts; lately noted. (See Machinery Wanted.)

Mo., Carterville.—Mrs. Mollie Miller and others are reported to erect business and lodge building. (See Association and Fraternal.)

Mo., St. Louis.—Geo. Meyricks will erect 2-story store and dwelling at 4500 Chouteau St.; cost \$8000.

Mo., St. Louis.—Louisa Sharkey will erect store and dwelling. (See Dwellings.)

Mo., St. Louis.—Lindell Fairground Real Estate & Investment Co. will erect 2-story store and dwelling at 2923-26 N. Grand St. and 3526 Dodder St., and 2-story tenement-house at 2520-22 Dodder St.; cost \$16,000.

Mo., St. Louis.—G. H. Mewman will erect store building on Florissant Ave.

Mo., St. Louis.—Opportunity Realty & Investment Co. will erect store and 5 apartments of 4 rooms and sun parlor at 39th and DeTonty Sts.; 3 stories; construction under supervision of Kuhs & Son; cost \$17,000.

Mo., St. Louis.—Welfare Realty Co. will erect 1-story mercantile building at 2827-33 Locust St.; cost \$8000.

N. C., Asheville.—Carter & Brown have plans by C. H. Chum, Asheville, for store and office building at Broadway and Haywood Sts.; 38x70 ft.; cost \$5000; tin roof; electric lighting; construction by Apr. 1. (Lately noted.)

N. C., Charlotte.—Burwell & Dunn will rebuild portion of building occupied by J. W. Bullard & Co.; plans not made. (Lately reported damaged by fire.)

N. C., Lincolnton.—C. E. Childs is reported considering erecting 3-story building.

N. C., Robersonville.—Mrs. D. A. Parker opens bids Apr. 1 to erect store and theater building; 48x90 ft.; ordinary construction; cost \$14,000; cost of lighting plant \$150; asbestos roof; Harry B. Wagner, Archt., Rocky Mount, N. C.

N. C., Rocky Mount.—John C. Stout completed plans for store building on S. Main St.; 2 stories; brick; cost \$12,000.

N. C., Rocky Mount.—J. D. Douglas has plans by Harry B. Wagner, Rocky Mount, for store and office building; 40x81 ft.; ordinary construction; cost \$9000; hot-air heat to cost \$400; cost of lighting \$350; tin roof; bids opened Apr. 1.

N. C., Sanford.—Builders' Supply Co. will erect building.

Okla., Tulsa.—Hancock & Nicely will expend \$7000 to erect structure to replace burned building. (Lately reported.)

Okla., Tulsa.—W. H. Nicely will erect business house; 60x100 ft.

S. C., Sumter.—Perry Moses and W. B. Upshur are reported to erect store; 55x100 ft.

Tenn., Knoxville.—L. D. Tyson is having plans prepared by A. B. Bauman, Knoxville, for 2 business buildings on State St. and store and apartment building at Broadway and Park Ave. (Lately noted.)

Tenn., Knoxville.—House-Hasson Hardware Co. will erect store building; 6 stories; brick; 50x200 ft.; R. F. Graf, Archt., Knoxville.

Tenn., Nashville.—Young & Landers will erect brick-veneer building at 11th St. near Belmont St.; cost \$4000.

Tex., Beaumont.—B. R. Norvell, W. C. Tyrell, Geo. D. Anderson and others are reported promoting company to erect building at Pearl and Fannin Sts.; brick.

Tex., Dallas.—Mrs. Jos. Lantz will erect 1-story brick building at 4951 Columbia St.; cost \$8150.

Tex., Emory.—Mat Skeen, Arlington, Tex., is reported to erect building; 60x110 ft.; cost \$10,000.

Tex., Galveston.—W. B. Munson, Denison, Tex., is reported having plans by L. S. Green, Galveston, for store and hotel building; 2 stories; brick; 75x120 ft.; 23 living-rooms on second floor; architect is receiving bids for construction.

Tex., Glen Rose.—R. S. Darnaby will rebuild store occupied by Sullivan & Wilson; 26x50 ft.; fireproof. (Lately reported damaged by fire.)

Tex., Marfa.—A. F. & A. M. will erect building for store, offices and lodgerooms. (See Association and Fraternal.)

Tex., Texas City.—W. P. Suttle, McKinney, Tex., is reported to erect 2-story brick building on 6th St.; 50x110 ft.; upper story for lodgerooms. (Lately noted under Tex., Galveston.)

Tex., Texas City.—Dr. W. K. Lindsey, Terrell, Tex., is reported to erect 2-story brick building on 6th St. (Lately noted under Tex., Galveston.)

Va., Richmond.—W. J. Gilman will erect 4 two-story brick stores at 200-02 N. Jefferson St. and 408-10 N. 1st St.; cost \$16,000.

THEATERS

Ala., Selma.—C. Frank Galliher, 425 Bell Bldg., Montgomery, is preparing plans for theater; 40x91 ft.; tapestry brick; stone and terra-cotta; copper marquee; tile floor in entrance; marble vestibule; cost \$15,000.

Md., Hagerstown.—Ernest Westfall, Mgr. of Palace Theater, and others are reported to have acquired site on S. Potomac St. for theater to cost about \$100,000.

Mo., St. Louis.—Louis Cella is having plans prepared for theater and office building. (See Bank and Office.)

N. C., Burlington.—C. F. Neese is reported having plans prepared for opera-house on Worth St.; 2 stories; 185x65 ft.; seating capacity 1000; 2 stories on lower floor, each 22½x44 ft.; cost \$15,000.

N. C., Greensboro.—Cozart Amusement Co., with \$50,000 capital, incptd. by J. H. Seaparks and others.

N. C., Robersonville.—Mrs. D. A. Parker opens bids Apr. 1 to erect theater and store building. (See Stores.)

Tex., Mineral Wells.—Sidney Webb will erect opera-house.

Va., Lynchburg.—O. B. Barker will expend \$25,000 to erect moving-picture theater; 50x132 ft.; ordinary construction; W. B. Sneed & Co. and W. T. Jones, both of Lynchburg, are low bidders; both will revise and submit new bids; Heard & Cardwell, Archts., Lynchburg. (Lately noted.)

Va., Norfolk.—Jno. D. Winn, Norfolk, is architect for moving-picture theater on Church St. near Nicholson St.; 50x125 ft.; brick stucco front; nonfireproof cement floor; steel trusses; plastic ornament; two 1-story stores on first floor; approximate cost \$14,000. (Lately noted.)

WAREHOUSES

Ala., Birmingham.—Linde Air Products Co., New York, is reported to erect warehouse.

Fla., Palatka.—Beach & Miller Steamship Co. purchased Teasdale dock, with 79-ft. frontage on St. John's River, and will erect warehouse.

Ga., Atlanta.—T. H. Brooks & Co. is reported to rebuild warehouse reported burned.

Ky., Elizabethtown.—Vine Grove Warehouse Co., with \$10,000 capital, incptd. by W. D. Carter, E. H. Bewley, J. D. Triplett and others.

La., Ponchatoula.—Ponchatoula Farmers' Assn. will erect warehouse.

Mo., St. Joseph.—Kelsey Nursery Co. is reported to erect warehouse; frostproof; brick and tile; 18 ft. high; 140x180 ft.; also erect brick office building 20x30 ft.; total cost \$20,000 to \$25,000.

N. C., Durham.—Durham Hosiery Mill Co. let contract Fiske-Carter Construction Co., Greenville, S. C., to erect warehouse 150x100 ft. (See Textile Mills.)

N. C., Lumberton.—Farmers' Tobacco Warehouse Co., K. M. Barnes, Prest., will erect warehouse. (Lately noted incptd.)

N. C., Warsaw.—J. L. Jaison will erect tobacco warehouse; 100x200 ft.; cost (without mechanical equipment) \$7000; construction by Apr. 1. (F. L. Falsom lately reported to erect warehouse.)

S. C., Sumter.—H. Harby contemplates rebuilding warehouse; plans not determined. (Lately reported damaged by fire.)

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Ga., Macon.—Ell Elkan of Crescent Laundry Co. let contract to Grady & Shaw, Macon, to erect apartment-house; 5 stories in rear; 3 stories in front; 80x118 ft.; 21 apartments; cost \$55,000; ordinary construction; Barrett's specification roofing; tile trimmings; low-pressure steam heat; electric and gas lighting; C. K. Colley, Archt., 33 Life & Casualty Bldg., Nashville, Tenn. (Lately noted.)

Ky., Maysville.—E. T. Kirk let contract to McDowell & Case, Maysville, to erect apartment-house at 2d and Flower Sts.; 55x78 ft.; cost \$30,000; brick; asbestos roof; steam heat to cost \$2500; electric lighting to cost \$700; Webber, Werner & Adkins, Archts., Cincinnati. (McDowell & Case lately noted letting contracts.)

Md., Baltimore.—Lyon Realty Co. (Jos. Berman, 231 Courtland St., and others) will erect apartment-house at Lake Drive and Linden Ave.; 120.10 x 115.8 ft.; 6 stories; slag or asbestos roof; steam heat; gas and electric lights; fireproof; 2 electric elevators; construction by owner, superintended by J. F. Kunkel, 413 King St., Baltimore, who also has contract for carpentry work; other sub-contractors include Hudson Cement & Supply Co., Western Maryland R. R. and 3d St., Walbrook, Baltimore, for terra-cotta; Standard Concrete Steel Co., Knickerbocker Bldg., Baltimore, for reinforced concrete floor and structural steel work; Chas. F. Berndt, 1236 N. Broadway, Baltimore, for bricklaying; John Freund, Jr., Archt., Hoffman Bldg., Baltimore; Henry Adams, Consult. Engr., 855 Calvert Bldg., Baltimore. (Lately noted.)

Mo., St. Louis.—C. Wieneck let contract to R. Mederacki to erect 2-story tenement-house at 420-24 Old Manchester Rd.; cost \$5000.

Mo., St. Louis.—Mohawk Realty Co. let contract to A. H. Gerling to erect tenement-house at 3632-34 Lafayette Ave.; 3 stories; cost \$12,000.

Mo., St. Louis.—W. R. Colcord let contract to F. Kirsher, Jr., to erect 2-story tenement at 4941 Parkway Pl.; cost \$9000.

Mo., St. Louis.—Bechert Realty Co., 6428 Michigan Ave., let contract to C. P. Brauner, 6437 Idaho Ave., St. Louis, to erect tenement-house at 3237-39 Pulaski St.; cost \$5000; ordinary construction; composition, tar and gravel roof; stoves; gas and electric lighting. (Lately noted.)

Tenn., Memphis.—W. B. Astor let contract to erect stores and flats. (See Stores.)

Va., Lynchburg.—Dr. E. F. Younger let contract to erect building to contain apartments and offices for physicians and surgeons. (See Bank and Office Buildings.)

ASSOCIATION AND FRATERNAL

N. C., Goldsboro.—Ruffin Lodge No. 6, Knights of Pythias will expend \$12,000 to erect lodge and store building; 44x165 ft.; ordinary construction; fireproof roof; contract (lately noted) let to W. P. Rose, Goldsboro.

BANK AND OFFICE

Ala., Dothan.—J. R. Young let contract to erect office and store building lately noted. (See Stores.)

Fla., Jacksonville.—Mills-Wood Investment Co. is reported to have let contract to erect store and office building. (See Stores.)

Fla., Panama City.—First National Bank will expend \$10,000 to erect bank building; 26x68 ft.; 1 story; exterior marble, terra-cotta and white enamel brick; ordinary construction; Barrett specification roofing; C. Frank Galliher, Archt., Montgomery, Ala.; contract (lately noted) let to Brown & Flowers, Dothan, Ala.; construction about April; contract for plumbing and wiring let to W. F. Martin, Dothan, Ala.

Md., Frederick.—C. E. Cline let contract to Mehrl Gittinger, Frederick, to remodel building for Commercial State Bank; construct concrete foundation, granite base; first story exterior of terra-cotta.

Md., Baltimore.—Produce Exchange Branch of State Bank of Maryland let contract to H. H. MacLellan, 15 E. Fayette St., Baltimore, to remodel bank building at 10-12 E. Pratt St.; slate and slag roof; cost \$10,000; E. H.

Tex., Dallas.—Knight Bros. Grain Co. will erect warehouse at 1722 Mays St.; cost \$3500.

Tex., Waco.—Magnolia Petroleum Co., Houston, is reported to erect warehouses and tanks. (See Gas & Oil.)

W. Va., Huntington.—Gwinn Bros. & Co. have plans for warehouse, office building, etc. (See Miscellaneous Enterprises.)

Glidden, Archt., Maryland Casualty Tower Bldg., Baltimore.

Mo., Springfield.—Keet estate let contract to L. W. Dumas, Jr. Construction Co., Columbia, Mo., to erect building; contractor wires Manufacturers Record: "Building will be 10 stories; steel frame; fireproof; cost \$175,000; Opel & Torblitt, Archts., Springfield and Kansas City."

Md., Williamsport.—Savings Bank of Williamsport let contract to David C. Miller, Halfway, Md., to erect bank building; A. J. Klinkhart, Archt., Hagerstown.

Tex., Galveston.—Galveston Ice & Cold Storage Co. is reported to have let contract to Wm. Janssen to erect office building; one story; brick; L. S. Green, Archt., Galveston.

Tex., Gilmer.—Al and Tom Walton are reported to have let contract to erect store and office building. (See Stores.)

Tex., Marfa.—Gus L. Maurer let contract to Bean & Beavers, Marfa, to erect business building to be occupied in part by New Era Printing Co. and offices.

Tex., San Antonio.—Alamo National Bank reported let contract for banking-room improvements. (See Buildings Proposed.)

Tex., Waco.—Owens Lumber Co., 5th and Columbus Sts., let contract to J. E. Johnson, Waco, to erect office and salesroom; 32x100 ft.; cost \$20,000; mill construction; gravel roof; steam heat; electric lighting; electric elevator; Milton W. Scott, Archt., Waco. (Lately noted.)

Va., Lynchburg.—Dr. E. F. Younger let contract to J. H. Coleman & Co., Lynchburg, to erect building to contain offices and apartments for physicians and surgeons; 33x60 ft.; 3 stories and basement; 2 suites of offices of 4 rooms each; 3 apartments; cost \$17,000; brick; Barrett specification roofing; vapor heat to cost \$1000; electric lighting; Heard & Cardwell, Archts., Lynchburg. (Lately noted.)

CHURCHES

Ga., Glenville.—Baptist church let contract to I. F. Leggett, Reidsville, Ga., to erect building; 35x78 ft.; brick; cost \$10,000; I. P. Crutchfield, Archt., Savannah. (Lately noted.)

CITY AND COUNTY

Ala., Montgomery.—Almshouse.—Montgomery County Board of Revenue, Thos. H. Edwards, County Engr., let contract to R. E. Majors, Box 145, Montgomery, to erect almshouse; 100x16 ft.; cost \$3312; ordinary construction; tin shingle roof. (Lately noted.)

Ark., Argenta.—City Hall.—City let contract to Shmeltzer & Shay, 1419 Jones St., Little Rock, to erect administration building; 55x148 ft.; fireproof; cost (complete) \$90,500; composition roof; electric lighting by Merchants' Lighting Co.; sidewalk lift; contracts for plumbing and electric wiring reported let respectively to Argenta Plumbing Co. (\$1643) and Rice Electric Co. (\$1165.35), both of Argenta; J. L. Howard, Archt., State Bank Bldg., Little Rock; lately noted. (See Machinery Wanted.)

La., New Orleans.—Market.—Dept. of Public Finances, Accounting Division, A. G. Ricks, Commr., let contracts at \$14,767 and \$12,940, respectively, to J. A. Petty, New Orleans, to remodel Washington Market at St. Roch and St. Claude Aves. and 9th St. Market at Magazine and 9th Sts.; plans by E. A. Christy, City Archt., call for brick wall around outside about 3 ft. high, above which will be placed screens; sanitary plumbing, refrigerators, comfort station; doors with ratproof bottoms; electric fans, etc. (Lately noted.)

Tenn., Sevierville.—Jail.—Sevier County Commrs. let contract to Pauly Jail Building Co., St. Louis, to repair jail; will construct concrete floor, provide 4 toolproof steel cells, etc.; cost \$2000. (Lately noted.)

Tex., Kingsville.—Hospital and Jail.—Elgin-Butler Brick & Tile Co., Elgin, Tex., is reported to have contract for brick to be used in erection of courthouse, hospital and jail for Kleberg county, and for erection of which bids will be opened Apr. 6; courthouse 96x96 ft.; 2 stories and basement; hospital 50x50 ft.; 2 stories and basement; Atlee B. Ayres, Archt., 626 Bedell Bldg., San Antonio. (Lately more fully detailed.)

COURTHOUSES

Ga., Statesboro.—Bulloch County Commrs. let contract at \$13,500 to Rogers-Simmons Co., McKee, Ga., to improve courthouse; completion in 5 months.

Tex., Kingsville.—Elgin-Butler Brick & Tile Co., Elgin, Tex., is reported to have contract for brick to be used in erecting courthouse, jail and hospital for Kleberg county. (See City and County.)

DWELLINGS

Ala., Andalusia.—J. W. Shreve let contract to Andalusia Mfg. Co. to erect residence; 12 rooms; cost \$12,000; C. Frank Galliher, Archt., Bell Bldg., Montgomery.

Ala., Gadsden.—R. P. Tatum let contract to M. J. Lloyd, Gadsden, to erect \$3000 bungalow.

Ala., Gadsden.—Jno. Bridges let contract to Edwards & Harris, Gadsden, to erect residence.

Ala., Gadsden.—V. B. Turner is reported to have let contract to erect residence on Lookout Mountain.

Ala., Gadsden.—Freeman Lancaster let contract to Edwards & Harris, Gadsden, to erect residence in Lovejoy addition.

Ala., Gadsden.—Sam'l. Black is reported to have let contract to erect residence on Lookout Mountain.

Ala., Gadsden.—Luke Hill let contract to Edwards & Harris, Gadsden, to erect residence.

Ala., Gadsden.—Jno. Lister is reported to have let contract to erect residence on Lookout Mountain.

Ga., Atlanta.—J. W. Patton let contract to P. G. Williams, Atlanta, to erect 2 one-story frame residences; cost \$3700.

Ga., Atlanta.—Mrs. L. M. Nichols let contract to H. W. Nicholes & Son, 414 Atlanta National Bank Bldg., Atlanta, to erect residence; 2 stories; brick veneer; tile roof; vapor heat; hardwood and tile floors; tile porches and bathrooms; cost \$9000. (Lately noted.)

Ga., Columbus.—Harry L. Williams let contract to Dudley Sash, Door & Lumber Co., Columbus, to erect residence; Hentz & Reid, Archts., Candler Bldg., Atlanta.

Ga., Lagrange.—Elm City Mills let contract to F. O. Cleveland to erect 8 cottages. (Lately noted.)

Ga., Macon.—City Realty Co., 508 3d St., has plans by and let contract to W. L. Lawson, Macon, to erect three 7-room dwellings.

Ga., Manchester.—H. P. Root let contract to J. P. Corley Lumber Co., Manchester, to erect 5-room residence.

Ga., Marietta.—Ryburn G. Clay let contract to Black Builders' Supply Co. to erect dwelling; 1½ stories; 7 rooms; cost \$4000; ordinary construction; shingle roof; hot-air heat; Harry Edmund Lindley, Archt., 617 Peters Bldg., Atlanta, Ga. (Lately noted.)

Ga., Thomasville.—R. H. Dixon let contract to J. W. L. Yates to erect bungalow.

Ga., Tifton.—R. W. Goodman let contract to W. H. Spooner to erect residence; 8 rooms; cost \$4000.

Ga., Waycross.—C. V. Stanton, Asst. Cash., First National Bank, let contract to V. C. Parker & Son, Waycross, to erect bungalow.

Ky., Corbin.—Joe Doodly let contract to erect residence; cost \$10,000.

Md., Baltimore.—M. P. Watkins has plans by Henry J. Tinley, 312 N. Charles St., Baltimore, for residence on Liberty Heights Ave. near Garrison Ave.; 2 stories and attic; cost \$5500; S. Sprent, Contr., 203 N. Pine St., Baltimore.

Md., Catonsville.—Mt. de Sales Academy will erect residence for Rev. Thos. J. Staunton, chaplain; Schatz Bros., Contrs., Catonsville.

Md., Baltimore.—H. W. Atkinson, 2114 Mt. Royal Ter., let contract to Roland Park Co., Munsey Bldg., Baltimore, and Roland Park, Md., to erect residence on Bishop Rd. near \$18,000; ordinary construction; Taylor & Mosley, Archts., 40 Wall St., New York. (Lately noted.)

Md., Mt. Washington.—Sam'l. H. Kirby, 207 W. Fayette St., Baltimore, let contract to Webb & White, Title Bldg., Baltimore, to erect cottage at Hill Top Park; 2½ stories; 10 rooms; cement cellar; slate roof; porches; hardwood floors.

Mo., St. Louis.—Wm. Herbert let contract to M. Trumpfeller to erect 2-story dwelling at 2486 Geraldine St.; cost \$3000.

Mo., St. Louis.—Mrs. J. Becker let contract to A. Beckmeier to erect 3-story dwelling and 1-story garage at 3163 Russell St.; cost \$8400.

Mo., St. Louis.—Wm. Bergman let contract to J. Chas. Mueller to erect residence at 4004

Green St.; 2 stories; 27x36 ft.; ordinary construction; cost \$4400; Nolte & Nauman, Architects.

N. C., Winston-Salem.—Alex. Hanes has plans by and let contract to J. E. Kenerly, Winston-Salem, to erect 8-room residence; cost \$3000; ordinary wood construction; hot-air heat to cost \$200; electric lighting; lately noted. (See Machinery Wanted.)

N. C., Winston-Salem.—Geo. W. Maslin will expend \$5000 to erect 7-room residence; ordinary construction; frame; cypress-shingle roof (material purchased); hot-air heat to cost \$250; electric lighting; W. H. Lord, Architect, Asheville, N. C.; contract (lately noted) let to J. E. Kenerly, Winston-Salem.

N. C., Winston-Salem.—T. P. Fulton will expend \$5000 to erect 9-room residence; ordinary construction; asbestos shingle roof; heating undetermined; electric lighting; Chas. K. Bryant, Architect, Richmond; contract (lately noted) let to J. E. Kenerly, Winston-Salem.

Okla., Tulsa.—H. C. Smiser let contract to W. H. Pomeroy, Tulsa, to erect residence; 28x32 ft.; cost \$5500; asbestos shingle roof; hot-water heat to cost \$750; electric lighting; L. E. Blue, Architect, Tulsa. (Mr. Pomeroy lately noted to erect dwelling.)

S. C., Camden.—G. C. Cook, Trenton, N. J., let contract to W. G. Adams to erect 2-story residence.

S. C., Camden.—H. G. Garrison, Jr., let contract to G. C. Stokes to erect residence on Broad St.; 2 stories; 7 rooms; cost \$3500.

S. C., Hagood.—R. M. Hildebrand, Cash, Bank of Hagood, let contract to E. S. Stokes, Camden, to erect residence; gas lights; cost \$4900.

Tenn., Memphis.—E. W. Smith is reported to have let contract to S. C. Turner to erect residence at Euclid Ave.; cost \$3000.

Tex., Calvert.—Dr. W. B. Cain let contract to erect residence.

Tex., Dallas.—R. J. Abernathy has plans by and let contract to R. P. Edmonston, Dallas, to erect dwelling at 5128 Reiger Ave.; 9 rooms; 2 stories; frame; ordinary construction; shingle roof; gas heating; electric lighting; cost \$4000.

Tex., Dallas.—Miss Emma Davis, 904 W. 9th St., let contract to J. L. Irwin, Hutchins, Tex., to erect 8-room residence, and to J. B. Hundley, 1105 Southwestern Life Bldg., Dallas, to erect 11-room dwelling; shingle roof; cost \$2000 and \$4500, respectively. (Lately noted.)

Tex., Edna.—Theo. Marman let contract to Lantz, Latum & Mendor to erect bungalow.

Tex., New Braunfels.—Ernest Eikel let contract to A. C. Moeller, New Braunfels, to erect residence on Castell St.; 40x50 ft.; cost \$900; frame; tin shingle roof; electric lighting; H. R. Voelcker, Architect, New Braunfels. (Lately noted.)

Tex., Plainview.—W. E. Risser is reported to have let contract to J. B. Maxey to erect 2-story residence.

Va., Graham.—Henry Stowers let contract to erect residence on Tazewell Ave.

Va., Graham.—W. B. Martin let contract to Graham Contracting Co., Graham, to erect residence; brick; cost \$10,000.

Va., Richmond.—T. Garnett Tabb let contract to A. F. Perrin, Richmond, to erect dwellings and garage; 2 stories; brick; slate roof; Marcus Hallett, Architect, Richmond. (Lately noted to cost \$18,000.)

Va., Richmond.—Wm. B. Pizzini let contract to A. L. Hunt to erect dwelling in Byrd Park; 16 rooms; brick walls; hot-water heat; tile roof; Carnel & Johnston, Architects, Richmond. (Lately noted.)

GOVERNMENT AND STATE

Tex., Corsicana.—Orphanage.—Trustees of Texas State Orphans' Home let contract to W. M. Rice, Amarillo, Tex., to erect industrial arts building; 2 stories; cost \$14,000; fireproof; concrete slab roof with tar and gravel finish; steam heat; electric lighting; Ernest E. McAnelly, Architect, Dallas. (Lately noted.)

Tex., Fort Bliss.—Stables, etc.—Government let contract to Mayfield-Shaw Engineering & Construction Co., Fort Bliss, to erect stables, etc.; 50x191 ft.; cost \$60,000; mill construction; composition shingle roof. (Lately noted.)

HOTELS

Ala., Gadsden.—Hotel Printup, Adolph P. Reich, Mgr., will erect 30-room addition; contract let.

Fla., Tampa.—J. L. Tallcavest will expend \$200,000 to erect addition to hotel; 105x114 ft.; 9 stories; fireproof; tar and gravel roof; vacuum heat; install plant for lighting and operating elevators; 2 high-speed elevators;

contract let to McGucken & Hyer, Box 1052, Tampa. (Lately noted.)

Tex., Rosenberg.—Mrs. M. E. Benson let contract to D. Moon to rebuild 24-room hotel. (Lately reported damaged by fire.)

MISCELLANEOUS

Fla., Jacksonville.—Sanitarium.—Dr. Carey P. Rogers let contract to Boykin Contracting Co., Jacksonville, to erect annex to sanitarium; 3 stories and basement; 41x48 ft.; Fisk tapestry brick facing; cost \$15,000; plumbing and heating contract let to Hooker & Lightbody Co., Jacksonville; asbestos shingle roof; contract let to Keesby & Mattison Co., Ambler, Pa.; materials purchased; J. H. W. Hawkins, Architect, Realty Bldg., Jacksonville.

Cn., Dillard.—Clubhouse.—Rabun Colony Club will expend \$20,000 to erect clubhouse; ordinary construction; Edw. E. Dougherty, Architect, Atlanta, Ga.; contract (lately noted) let to Mackle-Crawford Construction Co., Grant Bldg., Atlanta.

Ga., Savannah.—Armory.—Chatham Artillery let contract to A. L. Wimlish, Savannah, to erect armory; 245x145 ft.; ordinary construction; steam heat; gravel and tin roof; H. W. Witcover, Architect, Savannah. (Lately noted to cost \$60,000.)

Ky., Louisville.—Clubhouse.—Audubon Club is reported to have let contract to erect addition to clubhouse in Audubon Park to provide 250 additional lockers, 12 showers with private dressing-rooms, new ventilating system; main dining-room 60 ft. long; glass porch dining-room 50x17 ft.; garbage incinerator; refrigerating plant, etc.; Ward & Glossop, Architects, Louisville.

S. C., Florence.—Undertaking.—W. M. Waters is reported to have let contract to erect building for store and undertaking establishment. (See Stores.)

Va., Pocahontas.—Restaurant.—J. Walton Thomas let contract to G. E. Stafford to erect restaurant; 3 stories; brick; E. L. Shuffelbarger, Architect.

RAILWAY STATIONS, SHEDS, ETC.

Ark., Searcy.—Chicago, Rock Island & Pacific Ry., C. A. Morse, Ch. Engr., Chicago, is reported to have let contract to J. A. Adams Construction Co., Chicago, to erect proposed freight and passenger station; brick; cost \$12,000.

Okla., Calvin.—Chicago, Rock Island & Pacific Ry., C. A. Morse, Chief Engr., Chicago, Ill., let contract to T. S. Leake & Co., Chicago, to erect passenger and freight station; 24x104 ft.; 1 story; frame construction; metal slate roof; stoves; A. T. Hawk, Architect, Chicago. (Lately noted.)

SCHOOLS

Ark., Allica.—City let contract at \$8485 to Spinnewebber & Peters, Pocahontas, Ark., to erect high school; brick; 6 rooms and auditorium.

Fla., St. Petersburg.—School Board is reported to have let contract at about \$38,000 to Frank Estes, St. Petersburg, to erect 4 schools; brick; tile roofs.

Fla., Wildwood.—Sumpter County School Board let contract to E. B. Dyer & Co., Tallahassee, to erect school; 100x63 ft.; cost \$12,000; ordinary construction; galvanized metal shingle roof; no heating plant; electric lighting; Bishop & Greer, Valdosta, Ga., Architects. (Lately noted.)

La., De Quincey.—Directors of Public Schools, Calcasieu Parish, Leon Chavanne, Prest., Lake Charles, La., let contract at \$18,000 to Caldwell Bros., Abbeville, La., to erect 2-story-and-basement brick school and alter adjacent building; 81x100 ft.; common face brick; structural steel; flat composition roof; plastered walls and deadening felt; vapor heat; I. C. Carter, Architect, Lake Charles, La. (Lately noted.)

La., Sulphur.—Directors of Public Schools, Calcasieu Parish, Leon Chavanne, Prest., Lake Charles, La., let contract at \$28,450 to Caldwell Bros., Abbeville, La., to erect 2-story brick school building with basement and other buildings; one building, 100x67 ft.; 15 classrooms connected with 35-ft. archway to old building; also separate 2-story industrial science and engine-room, 45x45 ft.; brick trimmings; crimped galvanized iron cornice and gutter; asbestos slate roof; structural steel work; reinforced concrete; iron fire escapes; ventilators; sanitary plumbing; drinking fountains; shower baths; electric wiring and floor deadening felt; slate blackboards; plastered walls; I. C. Carter, Architect, Lake Charles, La. (Lately noted.)

N. C., Kinston.—Trustees Kinston Graded School let contract to Blacklock Bros., New-

bern, N. C., to erect high school; cost (without mechanical equipment) \$32,500; ordinary construction; tar and gravel roof; Frank K. Thompson, Architect, Raleigh, N. C. (Lately noted.)

Tex., Bonham.—School Board let contracts for plumbing and heating for high school to Kennison Bros., Dallas, and Chas. Davis & Co., Bonham, respectively; structure to be semi-fireproof; 116x142 ft.; cost \$48,500; split system (mechanical) heating to cost \$3500; electric lighting to cost \$1200; Sparger & Peters, Architects, Bonham. (Lately noted to have let general contract to Caddo Construction Co., Muskogee, Okla.)

Tex., Grand Prairie.—Independent Public School Dist. Trustees let contract to A. J. Olson, Cisco, Tex., to erect 8-room brick school building and remodel building adjoining; cost \$20,000; ordinary construction; tar and gravel roof; stoves; H. A. Overbeck, Architect, Dallas, Tex.; material contracts let. (Lately noted.)

STORES

Ala., Dothan.—J. R. Young let contract to R. A. Chapman, Montgomery, to erect store and office building at Main and St. Andrews Sts.; 30x29 ft.; cost \$15,000; first floor fireproof; other floors ordinary construction; Taylor's old-style roof, 40-lb. coating; vacuum and vapor system of heating; electric lighting; prism sidewalk lights; electric passenger elevator; C. Frank Galllher, Architect, 425 Bell Bldg., Montgomery. (Lately noted.)

Fla., Jacksonville.—Mills-Wood Investment Co. is reported to have let contract to O. P. Woodcock Construction Co., Jacksonville, to erect store and office building on Adams St.; 6 stories; brick and concrete; cost \$85,000; Rutledge Holmes, Architect, Duval Bldg., Jacksonville.

Ga., Arlington.—Y. W. Fudge let contract to W. S. Beauchamp to erect 2 brick stores with plate-glass fronts.

N. C., Goldsboro.—Ruffin Lodge, No. 6, Knights of Pythias, let contract to erect store and lodge building. (See Association and Fraternal Buildings.)

N. C., Henderson.—J. M. Young let contract to T. I. Harris, Henderson, to erect 2 brick stores.

S. C., Florence.—W. M. Waters is reported to have let contract to erect buildings for furniture store, undertaking establishment, etc.; 3 stories; brick; 30x200 ft.; brick, stone, plate glass and steel; W. D. Harper, Architect, Florence.

Tenn., Knoxville.—J. M. Dunn & Son, Knoxville, have contract at \$13,500 to remodel and erect addition to building at 514 S. Gay St.; L. C. Waters, Architect.

Tenn., Memphis.—W. B. Astor let contract to J. W. Roane, Memphis, to erect store and flats at 574 S. Front St.; cost \$5900.

Tenn., Nashville.—J. C. Bittle is reported to have let contract to erect 4 stores with apartments above.

Tenn., Sweetwater.—Scruggs Realty Co. has plans by and let contract to U. S. Beard, Sweetwater, to erect store building; 115x90 ft.; cost \$18,000; ordinary construction; heating plant contract not let; electric lighting; freight elevator to cost \$300. (Lately noted.)

RAILROAD CONSTRUCTION

RAILWAYS

Fla., Jacksonville.—Jacksonville Terminal Co. is contemplating construction of more sidings to handle increased traffic. W. L. Morse is Chief Engr.

Ga., Milledgeville.—The Milledgeville Ry. Co. hopes to build and extension to the Oconee River Mills within the next year. There is no immediate prospect of doing so. G. H. Tunnell is general manager.

Ky., Artemus.—Louisville & Nashville R. R. is surveying for a new route between Artemus and Four Mile. It is reported, and a double-tracked line may be built. H. C. Williams is Ch. Engr. of Constr. at Louisville.

Ky., Fulton.—On the Illinois Central's second track plan, between Fulton and Memphis, Chester Bondurant and L. T. Callahan of Fulton have been awarded a contract to move 625,000 cu. yds. of earth from Gibbs to Curve.

Ky., Middlesboro.—Looney Creek R. R. Co., capital \$25,000, is incept. by C. F. Blanton, D. B. Wentz, W. G. Kent and others for a 5-mi. line in Harlan county.

Ky., Russell.—Concerning the report that the Chesapeake & Ohio Ry. would enlarge its yards at Russell, F. J. Cabell, Ch. Engr., says no arrangements have been made for the work. Nothing definite is decided.

Tex., Gilmer.—Al and Tom Walton are reported to have let contract to erect business building; 2 stories; 30x100 ft.; lower floor for stores; upper floor for offices.

Tex., Gilmer.—Futrell Bros. are reported to have let contract to erect brick building; 25x50 ft.

Va., Pocahontas.—J. W. Coleman let contract to G. E. Stafford to erect building; E. V. Garrett, Architect, Pocahontas.

THEATERS

Ga., Atlanta.—Chaplain & Corley let contract to Queen & Neal, Atlanta, to remodel building in West End for moving picture theater; construction begun; W. C. Meador, Architect, 1114 Empire Bldg., Atlanta.

Ky., Harlan.—Creech & Cawood let contract to F. F. Cawood to erect moving-picture theater; 32x55 ft.; cost \$9000; brick; metal partitions; Carey's roofing; heating and lighting contracts not let. (Previously noted.)

N. C., Greensboro.—W. C. and C. B. Boren will erect theater; seating capacity 800 to 1000; contract let.

Tex., El Paso.—Alhambra Theater Co. let contract to Otis P. Krouer, El Paso, to erect theater on El Paso St.; 42x134 ft.; 3 stories; cost (without mechanical equipment) \$25,000; ordinary construction.

WAREHOUSES

Ala., Opelika.—Farmers' Alliance Co-operative Assn. has plans by and let contract to B. E. Hudson to erect cotton warehouse; 200x191 ft.; cost (including automatic sprinklers and 4000-gal. tank) \$18,000; mill construction; tar and gravel roof. (Lately noted.)

Ga., Columbus.—Meritas Mills, J. T. Broadbent, Gen. Mgr., 320 Broadway, New York, let contract to T. C. Thompson, Charlotte, N. C., to erect warehouse; 50x120 ft.; cost \$10,000; mill construction; Barrett specification roof; electric elevator to cost \$1000. (Lately noted.)

Md., Baltimore.—R. B. Mason, 308 W. Madison St., Baltimore, has contract to erect Diez-Roemer Warehouse; 3 stories; 68x25 ft.; brick; first floor reinforced concrete; other floors wood; cost \$7500.

S. C., Sumter.—A. H. Sellers, Columbia, S. C., has contract to erect tobacco warehouse; 157x700 ft.; completion by June 15; 2 prize-houses will also probably be erected, each 60x40 ft. (Farmers' Tobacco Warehouse noted in January to erect warehouse.)

Tex., Dallas.—Higginbotham-Bailey-Logan Co. let contract to Hughes O'Rourke Construction Co., Dallas, to erect warehouse; 7 stories and basement; 75x200 ft.; fireproof; Barrett specification roof; reported cost \$100,000; Lang & Wittich, Architects, 1614 Southwestern Life Bldg., Dallas. (Lately noted.)

Va., Richmond.—Geo. R. Newsom & Co. let contract to J. T. Nichols, Richmond, to erect 4-story warehouse; 60x120 ft.; brick walls; wood floors; ordinary construction; electric lighting; Carnel & Johnston, Architects, Chamber of Commerce Bldg., Richmond.

La., Alexandria.—Tioga Gravel Co. of Alexandria will push to early completion construction of a railroad 19 mi. long from its gravel pit to Alexandria. A. H. Stille, P. O. Box 553, St. Louis, Mo., is Pres. and 1 Gen. Mgr.; A. D. Alderson, Houston, Tex., V.-P.; George K. Force, Alexandria, La., Supt., and I. L. Thomas, Alexandria, Secy.

La., Kenner.—The Orleans-Kenner Interurban Ry. Co. has 12 mi. of line graded, and tracklaying is about to begin. A. Smith Bowman is Pres., Andrew Fitzpatrick V.-P., and Harry K. Johnson Ch. Engr.

Md., Millersville.—H. M. Knight of Knight, Williams & Stewart, Rome, N. Y., is making preliminary survey for the proposed Baltimore & Virginia R. R., and has gone over nearly half of the route from Millersville to Drum Point, Md., 55 mi. D. B. Stewart, Pres. of the Stewart Fruit Co., Baltimore, is V.-P. of the railroad company. Hyland P. Stewart, attorney-at-law, 1219 Fidelity Bldg., Baltimore, is also a director. Others on the board are J. C. Leib, Baltimore, who is Secy.; Benjamin Watkins, Chesterfield, Md.; J. Cook Webster, Solomons, Md.; James Cheston, West Viver, Md., who is Treas., and Wm. H. Stewart, superintendent of agencies of the Metropolitan Life Insurance Co., New York.

Mo., St. Louis.—Chicago, Burlington &

Quincy R. R. is considering the possibility of building a low-grade line to Kansas City, but no definite plans have been prepared, although a number of tentative propositions have been considered. It was recently reported that the directors had authorized construction of a double-track line from St. Louis to Kansas City. Darius Miller, Chicago, is president.

N. C., Durham.—Capt. E. J. Parrish and others, says a report, are working on plans to construct an electric railway from Durham to the Eno River.

N. C., Louisburg.—Chamber of Commerce has passed a resolution favoring the issue of \$100,000 of bonds by Louisburg township to aid the proposed railroad from Louisburg to Rocky Mount, N. C., about 40 mi., for which a charter has been obtained by Mayor James A. Turner. F. B. McKinnis is president and S. A. Newell secretary Chamber of Commerce.

Okl., Perry.—Pres. S. M. Porter of the Kansas & Oklahoma Southern Ry. Co., recently chartered, says it will soon be in the market with a \$2,000,000 issue of bonds on which it wants to raise \$900,000 in cash to complete a section of railway between Caney, Kans., and Vinita, Okla., 61 mi., via Wann and Nowata, Okla., on which there has been expended \$320,000 in cash for road-bed, right of way, etc. Route is through Oklahoma oil fields. George A. Masters is V.-P.; R. E. Wade, Treas.; H. V. Bollinger, Secy.; J. H. Brewster, Gen. Mgr., and B. J. Dutton, Ch. Engr., the latter at Lawrence, Kans.

Tenn., Memphis.—The Frisco system will immediately improve 21 mi. of its line between Memphis and Turrell, Ark. Heavier rails will be laid and cross-ties put in. Rallasting will also be done. C. H. Baltzell, Thayer, Mo., is superintendent.

Tenn., Memphis.—Illinois Central R. R. will lay its tracks on top of the proposed new levee along the east bank of Wolf River in Memphis, the company sharing with the city the cost of constructing the levee. A. S. Baldwin, Chicago, is Ch. Engr.

Tex., Amarillo.—Pecos & Northern Texas R. R. has been authorized to issue and register \$2,320,000 of bonds, and, it is stated, extensions are contemplated. F. M. Bisbee, Amarillo, Tex., is Chief Engr.

Tex., Belton.—Central Ry. Co. of Texas is the new name decided upon by the directors of the Quannah, Seymour, Dublin & Gulf Ry. Co., and construction will be continued as soon as right of way and bonuses are cleared up. It is announced that the line has been financed; capital \$550,000. Charter amendment to be filed immediately. Incorporators are L. E. Walker of Austin, Charles G. Johnson of Rockport, J. T. Weiser of Hico, W. S. Hunter, Dr. Pitt S. Turner, George W. Tyler, Dr. M. P. McElhannon and R. Y. Walker of Belton, and E. Cowperthwaite of London, England.

Tex., Denton.—John Mead, Ch. Engr., is about to begin survey of entrance to Denton for the proposed Fort Worth-Denton interurban railway, of which E. P. Turner of Fort Worth and others are promoters.

Tex., Freeport.—Gulf, Freeport & Northern R. R. Co. is reported to have completed 16 mi. of grade in the vicinity of Damon and Fairchild in Fort Bend county and Damon and Columbia in Brazoria county. C. Davis, Damon, Tex., is Pres., and C. L. Sharp, Marshall, Tex., is V.-P. and Gen. Mgr.

Tex., Uvalde.—Uvalde & Northern R. R. Co., capital \$90,000, is chartered to build a line from Uvalde to a point at or near the headwaters of Camp Wood Creek in Real county, 55 mi. It will traverse lands of the United Timber & Kaolin Assn., Ltd. Incorporators: L. J. Smith, contractor, and E. H. McVey, both of Kansas City, Mo.; L. J. Wardlaw of Sonora, Tex.; Fred C. Adams, Will A. Morris, W. P. Brice, J. J. Ford, S. P. Skinner and Sidney Turner of San Antonio, and R. C. Walker of Austin, Tex.

Va., Hampton.—The Ganaway-Hudgins Co., contractors, Hampton, will build a railroad 8 mi. long, it is reported, from Hampton via Fox Hill to Grand View on Chesapeake Bay. Construction will begin about May 15. C. E. Potts is promoter.

W. Va., Hedgesville.—The Back Creek Valley R. R. Co. is not yet ready to announce construction plans. D. Currier, Jr., Hedgesville, is Secy. John Butler of Washington, D. C., and L. H. Roney of Tomahawk, W. Va., are reported interested.

STREET RAILWAYS

Ga., Atlanta.—Georgia Railway & Power Co. is asking franchise for a track on Butler St. from Decatur to Gilmer St.; also on Alabama St. from Broad to Forsyth St. P. S. Arkwright is Pres.

Ga., Jackson.—Capt. L. W. Roberts of Atlanta and E. S. Hunnicutt of Toecoa, Ga., are reported working on a plan for a street railway in Jackson.

Ga., Rome.—The Rome Ry. & Light Co. proposes to increase its capital stock from \$500,000 to \$1,000,000. Improvements may be made. S. S. Bush is V.-P. and Gen. Mgr.

La., Shreveport.—The Shreveport Traction Co. contemplates double-tracking on Texas Ave. from Jordan to Cedar St. W. A. Sullivan is Gen. Mgr.

N. C., Gastonia.—Piedmont & Northern line expects to extend the street-car line in Gastonia about one mi. from the Loray Mill to the Gray Mill. W. S. Lee, Charlotte, N. C., is vice-president.

W. Va., Huntington.—Ohio Valley Electric Ry. Co. will double-track the Third Ave. street railway from 10th St. eastward and the Fourth Ave. line from 4th St. westward. W. W. Magoon is general manager.

Bridge Construction.—See Road Construction.

Bridge Construction.—Macon County Commrs., F. J. Frederick, Chrmn., Oglethorpe, Ga.—Bids until Mch. 25 to construct steel or concrete bridge over Beaver Creek at Montezuma; plans and specifications on file in clerk's office of County Commrs., Oglethorpe.

Bridge Construction.—See Road and Bridge Construction.

Bridge Construction.—J. W. Munson, Judge, Brazoria County, Angleton, Tex.—Bids until Mch. 21 to construct steel draw-span highway bridge over Bastrop bayou; plans and specifications at offices of County Judge or T. C. Tolman, Engr., Houston, Tex.

Bridge Construction.—E. B. Bonney, City Secy., Houston, Tex.—Bids until April 2 to construct Franklin Ave. bridge according to plans and specifications prepared by E. E. Sands, City Engr.

Bridge Construction.—Lowndes County Supra., Willis Banks, Pres., Columbus, Miss.—Bids until April 6 for 2 trestle bridges on Pickensville Rd., one of 390 ft. at Suxappaliba Creek and one of 140 ft. at 7-Mile Branch; optional bids on wood and steel structure desired; plans by Chas. Lyon Wood, Engr., Columbus.

Bridge Construction, etc.—City of Greenville, S. C., John B. Marshall, Mayor.—Bids until Mch. 29 to erect two 40-ft. steel approach spans and remodel old span of Cleveland St. bridge and erect 40 or 50-ft. span on Hudson St.; also erect ornamental granite and limestone entrance at Springwood Cemetery and lay about 3000 sq. yds. concrete drive and 4000 lin. ft. combination cement curb and gutter in Springwood Cemetery; plans and specifications on file with C. P. Ballenger, City Engr.

Building Materials.—Geo. C. Ludwig, Keyser, W. Va.—Prices on building materials.

Building Materials.—Wood, Preistley & Co., Martin, Tenn.—Prices on building materials.

Building Material.—Emory C. Crum, Frederick, Md.—Prices on building material for \$15,000 store and apartment building.

Building Materials.—Venus T. Ritter, Ritter Bldg., Huntington, W. Va.—Catalogues from manufacturers of materials of interest to architects.

Building Materials.—Frank Wright, Cave Springs, Ga.—Prices on all building material (except framing and machinery) necessary to erect first-class concrete-galvanized covered mill building, 50x120 ft.; also small drykiln and yard tramway.

Building Materials.—W. M. Bacon, Hendersonville, N. C.—Prices on pressed brick, hardware, hardwood flooring, leaded glass, electric-light fixtures, beaver board and building lumber.

Bridge Construction.—Galveston county, John M. Murch, Auditor, Galveston, Tex.—Bids until Mch. 23 to construct reinforced concrete bridge and culvert on 61st Rd.; plans and specifications in office of County Auditor.

Burlap.—J. S. Wilson, Bailey, N. C.—Correspondence with manufacturers of burlap.

Canning Machinery.—J. E. Lusk, Pleasant Grove Mfg. Co., Pleasant Grove, Miss.—Prices and catalogues on machinery for manufacturing and canning syrups, fruits, vegetables and other farm products.

Canning Machinery.—F. N. (Taylor) Cummings, Claremont, Va.—Prices on new or second-hand canning factory for beans, peas and tomatoes, and evaporator for pumpkin, squash and small fruits.

Cars.—J. W. Jackson, Sumter, S. C.—Names and addresses of manufacturers of gasoline cars to run on railroad tracks.

Clayworking Machinery.—J. E. Lusk, Pleasant Grove Mfg. Co., Pleasant Grove, Miss.—Prices and catalogues on machinery to manufacture brick, tile and other constructive materials.

Cement.—Daniel W. Adams, Ch. Engr. White Coal Power Co., Old Fort, N. C.—Prices on 2 cars cement.

Church Furniture.—M. E. Church South, Rev. A. J. McCary, pastor, Kilgore, Tex.—Prices on furniture for \$4000 church building.

Coffee-roasting Equipment.—United Coffee Co., C. W. Brown, Secy., 315 Carondelet St., New Orleans, La.—Bids April 1 to install machinery for roasting and packing coffee; daily capacity, 6000 lbs.

Conveyor Belt.—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids April 14 to furnish 2300 ft. conveyor belt; delivery

Navy-yard, Brooklyn, N. Y.; for copies of schedules apply to navy pay office nearest navy-yard.

Crusher.—Apalachee Packing Co., R. R. Rice, Secy.-Treas., Apalachicola, Fla.—Prices on oyster shell crusher for poultry food.

Crusher, etc.—Board of Mayor and Aldermen, Bay St. Louis, Miss.—Bids until April 4 for shell crusher to crush green shells for road purposes; capacity 20 to 40 tons; fully equipped; also gasoline engine to operate crusher; R. F. O'Brien, Secy.

Coal.—Benj. Russell, Pres. First National Bank, Alexander City, Ala.—Prices on car of egg-shell size hard coal for domestic uses.

Concrete Mixer.—Holt Construction Co., Denton, Md.—Prices on concrete mixer.

Cotton Gins.—Race Paths Gin Co., T. Whitaker, Secy., Route 1, Ellenboro, N. C.—Prices on cotton gins.

Curbing, etc.—City of Houston, Tex., E. B. Bonney, City Secy.—Bids opened Mch. 19 to construct standard combined curbs and gutters on sections of 10th, Johnson, Colorado and Henderson Sts.; specifications and information obtainable from E. E. Sands, City Engr.; Ben Campbell, Mayor.

Ditching Machinery.—Edward Miller, Crystal Springs, Fla.—Names and addresses of manufacturers of ditching machinery.

Drills (Rock).—J. F. Byrd of Byrd Bros., R. F. D. No. 3, Salisbury, N. C.—Prices on 3 to 3½ piston size second-hand rock drills, with or without tripods; state make, type, serial number, time used, guaranteed condition and location.

Drykiln.—Frank Wright, Cave Springs, Ga.—Prices on small drykiln. (See Building Materials.)

Egg Fillers.—F. N. (Taylor) Cummings, Claremont, Va.—Wholesale prices on egg fillers.

Electric-light Plant.—C. W. Petty, 818 North St., Greensboro, N. C.—Prices on 125 K. W. generator, 60 cycles, 2200-volt, 3-phase D. C., connected to Corliss engine of suitable size; also poles, wire, pole line, hardware, cross-arms, transformers, meters and house wiring material for Duplin Power Co.'s plant, Warsaw, N. C.

Electric-light Plant.—City of Eunice, La., Stanislaus Wyble, Mayor.—Bids until April 16 for building, foundations, machinery and pole lines for electric-light plant; plans and specifications obtainable from E. M. Kurchedd, Consult. Engr., 518 Whitney Central Bldg., New Orleans, La., upon deposit of \$5, refunded on return of plans and specifications to engineer; Robt. Lafluer, Clerk.

Electric Lighting and Heating Plant.—Walter G. Franz, Union Trust Bldg., Cincinnati, O.—Bids until Mch. 28 to construct central lighting and heating plant at Tuskegee Normal and Industrial Institute, Tuskegee Institute, Ala.; power-house, 192x112 ft., including concrete coal bunker; following equipment will be required: Water tube boilers, engines, generators, transformers, motors and electrical transmission system; plans and specifications at offices of Consult. Engr. and R. R. Taylor, Director of Industries, Tuskegee Institute.

Electric-lighting System.—Town of Princess Anne, Md., J. Douglass Wallop, Commr.—Bids until April 3 for lighting streets; specifications require 65 80 C. P. lights to burn all night during year and every night, with privilege of town to install additional lights of same capacity at same rate per light per annum.

Electrical Equipment.—Emory C. Crum, Frederick, Md.—Prices on electrical equipment for \$15,000 store and apartment building.

Electrical Equipment.—J. A. Womack, Marceline, Mo.—Prices on electrical work for residence.

Electric Lamps.—Board of Bond Trustees, Frank Richardson, Chrmn., Jacksonville, Fla.—Bids until April 6 for furnishing f. o. b. quantity of lamps to supply needs of municipal electric plant for 1 year; estimated about \$2500 value, on basis of future delivery contract; lamps will be required of 100-115 volts multiple type; also 75 100 watts street series style, 4.3 to 4.5 amperes; to be shipped from time to time as needed; further information obtainable on application to R. N. Ellis, Purchasing Agent.

Electric-light Plant.—City of Oakdale, Ky.—To grant franchise for electric-light plant for street and domestic lighting; bids May 1; for information, J. A. Hagan, Mayor, 3330 Grand Blvd., Louisville, Ky.

Electrical Machinery.—Electrical Supply Co., 125 Camp St., New Orleans, La.—Prices on second-hand 25 K. W. 230-volt, 30 K. W. 110-volt, ½ K. W. 110-volt and ¾ K. W. 110-volt belted generators.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

"WANTS"

Aluminum Frames.—Commrs. District of Columbia, Washington, D. C.—Bids until Mch. 23 for furnishing and delivering 130 cast aluminum spherical ribbed frames for street lamps for use in Electrical Dept.; specifications and proposal forms obtainable from Purchasing Officer, Room 320, District Bldg.

Automobile Supplies.—Cyclecar Sales Co., Eugene L. deHez, Secy., 842 Granby St., Norfolk, Va.—Catalogues from manufacturers producing supplies of any kind pertaining to automobile business. (See Machine Tools.)

Bank Fixtures, etc.—People's Bank, J. W. Hunnicutt, Pres., Centerville, Ala.—Prices on bank fixtures and safe and vault doors; expects to place orders for fixtures not later than Mch. 23.

Barrels.—S. J. Shuping, 322 E. Inniss St., Salisbury, N. C.—Addresses of manufacturers of sheet-iron barrels for packing and shipping sweeping compound.

Belting.—Race Paths Gin Co., T. Whitaker, Secy., Route 1, Ellenboro, N. C.—Prices on canvas and rubber belting.

Boring Machine.—Hosball, Simmons & Co., 90 S. Front St., Memphis, Tenn.—

Prices on second-hand Defiance heavy folio, bow and rim-bending machine in first-class condition and late type; describe fully in first letter apparatus connected with it.

Bicycles.—W. C. Johnson, Kingston, Ga. Names and addresses of manufacturers of cheap bicycles for retail trade.

Blowers.—See Sawmills, etc.

Boiler.—R. L. Muse & Co., Walnut Ridge, Ark.—Wants to purchase second-hand tubular boiler (Heine preferred), about 300 H. P., with guarantee to carry about 135-lb. pressure.

Boiler Hood.—Frank Wright, Cave Springs, Ga.—Prices on hood or front and stack for 45 H. P. boiler, 54 in. in diam.

Boilers.—Cheat River Coal Co., A. R. Balcom, Pres., Albright, W. Va.—Prices on boilers; new or second-hand.

Boilers.—Wood, Preistley & Co., Martin, Tenn.—Prices on boilers.

Bottles.—J. S. Wilson, Bailey, N. C.—Correspondence with manufacturers of glass bottles.

Boring Machine.—C. L. Highbee, Durham, N. C.—Prices on blind style boring machine (or combined machine) for stationary slats.

Electrical Supplies.—N. J. Norman, St. George, Ga.—Prices on wire, insulators and brackets.

Electrical Supplies, Hardware, etc. Postoffice Dept., A. S. Burleson, Postmaster-General, Washington, D. C.—Bids at office of Purchasing Agent of Dept. until April 22 for furnishing electrical supplies (motors, carbons, fuses, tape); hardware, scales, copying presses, baskets, trucks, metals, collar fasteners, household supplies and motor vehicle supplies, stationery (including paper, cards and cardboard, copy and blank books, tags, drawing materials, inks and mucilage, pens, penholders, pencils, erasers, knives and shears, typewriters and supplies, rubber goods, etc.); computing, baling, addressing, cancelling, opening, adding and perforating machines; rubber, and steel stamps, and inks, pads and racks for same; numbering machines, seals, packing boxes, dry-goods, flags, twine and cordage; leather and leather belting; castings; oils and chemicals and collector sacks, as may be ordered during year from July 1, 1914, to June 30, 1915. Blanks for proposals, with specifications to bidders, furnished on application to Purchasing Agent.

Elevator.—J. I. Howard, State Bank Bldg., Little Rock, Ark.—Prices on sidewalk lift for administration building at Argenta, Ark.

Engine.—Board of Mayor and Aldermen, Bay St. Louis, Miss.—Bids until April 4 for gasoline engine to operate shell crusher. (See Crusher, etc.)

Engine.—Moccasin Tracks Oil & Gas Co., H. H. Harbison, Sapulpa, Okla.—Probably prices on gas engine.

Engines.—Wood, Preistley & Co., Martin, Tenn.—Prices on engines.

Engines.—Cheat River Coal Co., A. R. Balcom, Prest., Albright, W. Va.—Prices on engines; new or second-hand.

Evaporator.—See Canning Machinery.

Flour.—Morocco-American Trading Co., H. Toledano, Gen. Mgr., Tangier, Morocco.—Correspondence with manufacturers of cheap wheat flour.

Flour Milling Machinery.—J. E. Lusk, Pleasant Grove Mfg. Co., Pleasant Grove, Miss.—Prices and catalogues on machinery to grind corn, wheat and other farm products.

Ginning Machinery.—J. E. Lusk, Pleasant Grove Mfg. Co., Pleasant Grove, Miss.—Prices and catalogues on cotton ginning machinery.

Grading, etc.—City of Durham, N. C.—Bids until Mch. 20 to grade 3 streets and construct concrete curb and gutter along same; about 8500 lin. yds. excavation and 7500 lin. ft. curb and gutter; information on application to City Engr.

Grinding and Polishing Machine.—Glascoc Stove & Mfg. Co., Greensboro, N. C.—Prices on new or second-hand machine for grinding and polishing stove spindles.

Hardware.—E. P. Carpenter, Driver Hardware Co., East Point, Ga.—Catalogues and price lists from manufacturers of shelf hardware.

Hardware, etc.—Navy Dept., Bureau of Yards and Docks, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids April 7 to furnish 110 10-in. sweep ratchet braces, 5100 gal. paint cans, 350 adjustable hacksaw frames and 700 1-gal. paint pots; delivery Navy-yard, Brooklyn, N. Y.; semi-annual steel wire nails, schedule 6546; delivery Navy-yard, Eastern; for copies of schedules apply to navy pay office nearest navy-yard.

Heating Plant.—See Electric Light and Heating Plant.

Heating Plant.—J. E. Kenerly, Winston-Salem, N. C.—Prices on hot-air heating plant.

Hydrocane "B."—Daniel W. Adams, Ch. Engr., White Coal Power Co., Old Fort, N. C.—Prices on 100 bbls. hydrocane "B."

Ice Plant.—F. N. (Taylor) Cummings, Claremont, Va.—Prices on small ice plant, new or second-hand; full description in first letter.

Insulating Material.—N. J. Norman, St. George, Ga.—Prices on cork board and granulated cork to insulate cold-storage rooms.

Lumber.—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids April 7 to furnish miscellaneous lot cypress and yellow pine lumber, spruce and white pine, schedule 6536; delivery Navy-yard, Newport, R. I.; 15,000 ft. white oak, 5000 ft. 1-in. mahogany, 3-in. white maple and 45,000 ft. No. 1 spruce, schedule 6541; delivery Navy-yard, Boston, Mass.; 12,000 ft. No. 1 yellow pine, schedule 6534; delivery Navy-yard, Port Royal, S. C.; miscellaneous lot cypress

soted yellow pine poles, schedule 6536; delivery Navy-yard, Norfolk, Va.; miscellaneous lot spruce shores, schedule 6541; delivery Navy-yard, Philadelphia, Pa.; 400 cypress crossies, schedule 6534; delivery Navy-yard, Charleston, S. C.; for copies of schedules apply to navy pay office nearest navy-yard.

Lathes, Taps and Dies, etc.—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids April 7 to furnish 20,000 yds. white watch mark braid, schedule 6541; 3300 deck scrubbing brushes without handles, 100 feather dust brushes, 3300 handles for scrub brushes, 2800 ft. upholstery leather, schedule 6542; 950 condenser tube packing, schedule 6545; 40,000 ft. plow steel hoisting rope, miscellaneous lot frogs, switches, etc., schedule 6534, and 51,000 lbs. annealed black wire, schedule 6534; 480 1 1/4-in. composition unions, schedule 6545; delivery Navy-yard, Brooklyn, N. Y.; 50,000 No. 1 hard red brick and 14,000 hollow brick, schedule 6535; delivery Navy-yard, Iona Island, N. Y.; 300,000 lbs. unspun cotton, schedule 6538; 75-in. boring and turning lathe and 2 extra heavy high-duty lathes, schedule 6531; taps and dies, schedule 6539; delivery Navy-yard, Washington, D. C.; furnishing and erecting steel work for roof for heating plant, schedule 6539; delivery Navy-yard, Chelsea, Mass.; miscellaneous lot of copper pipe, schedule 6545; delivery Navy-yard, Boston, Mass.; 20 short tons 80-lb. steel rail, schedule 6534; delivery Navy-yard, Charleston, S. C.; 3 single-phase transformers, schedule 6537; delivery Navy-yard,

machinery to manufacture tin shingles for roofing.

Metals.—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids April 7 to furnish 3320 lbs. naval bar brass and 1000 lbs. phosphor copper in 5-lb. ingots, schedule 6545; delivery Navy-yard, Brooklyn, N. Y.; miscellaneous lot iron castings for stairs and 50 tons No. 1 pig-iron, schedule 6534; delivery Navy-yard, Philadelphia, Pa.; for copies of schedules apply to navy pay office nearest navy-yard.

Mill Work.—M. E. Church South, Rev. A. J. McCary, pastor, Kilgore, Tex.—Prices on windows and doors for \$4000 church building.

Mining Equipment.—Cheat River Coal Co., A. R. Balcom, Prest., Albright, W. Va.—Prices on electrically equipped coal-cutting equipment; new or second-hand.

Motor Truck.—C. L. Highbee, Durham, N. C.—Prices on second-hand motor truck.

Nailing Machine.—F. N. (Taylor) Cummings, Claremont, Va.—Prices on nailing machine for boxes; cash and term prices.

Novelties.—J. S. Wilson, Bailey, N. C.—Correspondence with manufacturers of novelties.

Oil.—Morocco-American Trading Co., H. Toledano, Gen. Mgr., Tangier, Morocco.—Prices on gasoline and fuel oil, c. i. f. Moroccan ports.

Oil Mill Machinery.—J. E. Lusk, Pleasant

FOR the benefit of business concerns, engineers, contractors, machinery manufacturers, dealers and others who find it profitable to follow up daily the industrial, commercial, railroad and financial development of the South and Southwest as published in this Construction Department,

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Norfolk, Va.; for schedules apply to navy pay office nearest navy-yard.

Levee Construction.—Comms. Atchafalaya Basin Levee Dist. V. M. LeFebvre, Prest., Port Allen, La.—Bids at office State Engrs., 213-215 New Orleans Court Bldg., New Orleans, La., until April 8 to construct sections Nos. 1 and 2, Port Barre South Levee; St. Landry and St. Martin parishes; new levee; contents, 600,000 cu. yds.; other information as to location, character of work, terms of payment, manner of submitting proposals, execution of contract and bond, time of beginning and completing work and blank proposal forms obtainable from State Engrs.; also from V. M. LeFebvre or T. G. Erwin, Prest. and Secy., respectively, of Atchafalaya Basin Levee Dist.

Machine Tools.—Cyclocar Sales Co., Eugene L. deFlegh, Secy., 842 Granby St., Norfolk, Va.—Catalogues from manufacturers of ordinary tools and small machinery generally used in repair and maintenance of motor cars.

Marble.—J. M. Rouse, 1049 Trimble St., Paducah, Ky.—Prices on marble for \$12,000 courthouse.

Metal Cutter.—F. N. (Taylor) Cummings, Claremont, Va.—Prices on small machine for cutting galvanized sheet metal; cash and term prices.

Metal Lath.—Barthold O. Casey, Inc., Houston, Tex.—Prices on carload of metal lath; desires samples.

Metal-working Machinery.—T. A. Butner, Prest. Twin City Metal Roofing & Supply Co., Winston-Salem, N. C.—Prices on

ant Grove Mfg. Co., Pleasant Grove, Miss.—Prices and catalogues on cottonseed-oil mill machinery.

Ovens, Cable, etc.—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids April 14 to furnish 2 portable core ovens, schedule 6526; paper insulated and lead-covered cable, telephone accessories, schedule 6433; refrigerators, cocoa fiber doormats, window shades and ranges, schedule 6470; cotton and insulating tape, schedule 6515; corn brooms, schedule 6515; lubricating oils, schedule 6533; delivery Navy-yard, Mare Island, Cal.; for copies of schedules apply to navy pay office nearest navy-yard.

Packages, etc.—Jenkins Lumber Co., Vidalia, Ga.—Prices on packages for truck-growers' use, Irish potato barrels, tomato crates, corn crates, bean crates, etc.; prices f. o. b. Vidalia in mixed carloads, knocked down.

Paints, etc.—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids April 7 to furnish 1,500,000 lbs. nitric and sulphuric acid mixed, schedule 6538; delivery Navy-yard, Washington, D. C.; 340 quarts liquid gold bronze, 7000 gals. whale oil in bbls. and 10,000 lbs. dry white zinc, schedule 6543; delivery Navy-yard, Brooklyn, N. Y.; miscellaneous lot amber-colored mineral oil, schedule 6543; delivery Navy-yard, Boston, Mass.; for copies of schedules apply to navy pay office nearest navy-yard.

Paving, etc.—City of Richmond, Va., Chas. E. Bolling, City Engr.—Bids opened

Mch. 16 for granolithic curbs, gutters and sidewalks, certain sewers, grading and graveling; forms of proposals furnished on application.

Paving, etc.—Board of Awards, Jas. H. Preston, Prest., Baltimore, Md.—Bids until Mch. 25 to curb and pave with sheet asphalt commercial and recreation pier, Thames St., between Broadway and Ann St.; specifications and plans obtainable at office of O. P. Lackey, Harbor Engr.

Paving, etc.—City of St. Louis, Mo., Room 300, New City Hall.—Bids until Mch. 24 to improve Gravois Ave from Spring Ave. to southwestern city limits, divided into 4 sections; plans, specifications, contract forms and other information obtainable from Board of Public Improvements and Street Commr.

Paving Block.—Board of Comms. of Port of New Orleans, Robt. Guerard, Prest., 200 New Orleans Court Bldg., New Orleans, La.—Bids until Mch. 25 to furnish one year's supply of creosoted wood paving blocks from April 1, 1914.

Paving.—E. B. Bonney, City Secy., Houston, Tex.—Bids until Mch. 25 to pave Crawford St. from north line of Dallas Ave. to south line of Texas Ave.; plans and specifications obtainable on application to E. E. Sands, City Engr.

Paving.—City of Webster Groves, Mo., R. L. Mook, City Engr.—Bids until April 13 to construct 15,000 sq. yds. 6-in. concrete pavements.

Paving Materials.—Office of City Clerk, San Antonio, Tex.—Bids until Mch. 28 on 35,000 to 100,000 sq. yds. following paving materials: 4-in. standard vitrified brick, 3-in. and 2 1/2-in. vertical fiber brick, 3 and 3 1/2-in. creosoted long leaf yellow pine blocks; Clinton G. Brown, Mayor.

Paving.—See Bridge Construction, etc.

Pipe and Casing.—Texas Supply Co., Beaumont, Tex.—Prices on 8, 10 and 12-in. and other sizes pipe and casing.

Pipe-threading Devices, etc.—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids April 14 to furnish miscellaneous lot hand-operated pipe-threading devices, 2 pipe-threading and cutting machines and lubricating oils, schedule 6533; delivery Navy-yard, Puget Sound, Washington; for copies of schedules apply navy pay office nearest navy-yard.

Piping.—Daniel W. Adams, Ch. Engr., White Coal Power Co., Old Fort, N. C.—Prices on 5 ml. wood stave pipe, 10 to 36 in.

Piping.—Moccasin Tracks Oil & Gas Co., H. H. Harbison, Sapulpa, Okla.—Probably prices on iron pipe.

Planer.—Ronda Coop & Egg Case Co., Ronda, N. C.—Prices on 12-in. Frank cigar box planer, second hand.

Plumbing.—J. A. Womack, Marceline, Mo.—Prices on plumbing for residence.

Pump.—St. Pauls Light & Power Co., Opie Odum, Secy.-Treas., St. Pauls, N. C.—Prices on small belt-drive force pump to use in mill buildings for fire protection; second-hand cheap pump sufficient.

Pumps.—Wood, Preistley & Co., Martin, Tenn.—Prices on pumps.

Pumping Station, etc.—Board of Bond Trustees, Frank Richardson, Chrmn., Jacksonville, Fla.—Bids until April 6 to remodel and extend pumping station of water-works and sub-station building for power plant, according to plans and specifications by Sargent Hamilton; on file in Engineering Dept.

Reinforcing Steel.—Holt Construction Co., Denton, Md.—Prices on reinforcing steel for road and bridge work in Talbot county.

Road Construction.—Garrett County Comms., A. G. Ross, Clerk, Oakland, Md.—Bids until April 20 to construct section of State-aid Highway along Oakland-Gardner Rd. by way of Weber's, distance of 5 ml.; blank forms, etc., obtainable on application to State Roads Com., 601 Garrett Bldg., Baltimore.

Road Construction.—W. A. Turner, Secy. Highway Comms., Supvr's Dist. No. 1 of Scott County, Forest, Miss.—Bids until April 6 to improve about 7 ml. of road; use local gravel; construct bridges and culverts in connection; bids invited on all kinds of culvert and for doing entire work, consisting of grading, bridging, surfacing and furnishing material; plans, profiles and specifications on file with Chancery Clerk of Scott County, at offices of W. A. Turner, Secy., Forest, and of Xavier A. Kramer, Engr., Magnolia; proposal blanks on application to Engr.

Road and Bridge Construction.—Maryland State Roads Com., O. E. Weller, Chrmn., 601 Garrett Bldg., Baltimore, Md.—

Bids until Mch. 31 to construct 5 sections of State highway, about 16.69 mi., as follows: Baltimore county, section along Belair Rd. from end of contract No. B-8 towards Kingsville, 4.61 mi., concrete, bituminous concrete or macadam; section along Frederick pike from Melvin Ave. to Patapsco River, about 3.37 mi., resurfacing; section along Westport Rd. from end of English Consul Estate to Patapsco River, 1.14 mi., concrete or macadam; Garrett county, 1 section along National pike between Piney Grove and Sutton, about 3.57 mi., resurfacing; Wilcomico county, section along Hebron Rd. between Salisbury and Rockawalking Rd., about 3.97 mi., shell resurfacing with bituminous top; Prince George's county, reinforced concrete bridge along Baltimore and Washington Rd. over Anacostia River; plans and specifications on application and payment of \$1 for each contract.

Roofing.—Race Paths Gin Co., T. Whitaker, Secy., Route 1, Ellenboro, N. C.—Prices on composition roofing.

Roofing.—W. M. Bacon, Hendersonville, N. C.—Prices on asbestos and slate roofing for \$5000 residence.

Reinforced Concrete Construction.—F. S. Royster Guano Co., Royster Bldg., Norfolk, Va.—Correspondence with reinforced concrete contractors relative to erecting 3-story 60x120-ft. reinforced concrete mill building.

Road Construction.—Galveston county, John M. Murch, Auditor, Galveston, Tex.—Bids until Mch. 23 to shell and bulkhead road between causeway road and beach; plans and specifications in office of County Auditor.

Road Construction.—Lamar County Comms., Courthouse, Vernon, Ala.—Bids until April 11 to improve Millport and Vernon Rd.; grade and gravel between stations 78 and 178, gravel between stations 290 and 360, and grade, drain and gravel between stations 380 and 426; expenditure, \$6542.26; W. S. Keller, State Highway Engr., Montgomery, Ala.

Road Construction, etc.—Madison County Highway Comms., W. E. Mann, Secy., Canton, Miss.—Bids until April 6 to permanently improve 14.5 mi. road in Dist. No. 3; gravel used for finishing surface and compacted with roller; concrete for smaller bridges and larger culverts; bids invited for entire work, consisting of grading, bridging, surfacing and furnishing all materials necessary to complete roads; plans and specifications obtainable on application to Xavier A. Kramer, Engr., Magnolia, Miss., and at office of Highway Comm., Madison Station, Miss.

Road Construction.—Highway Comms. of Supvs. Dist. No. 1 of Prentiss County, G. L. Holley, Secy., Booneville, Miss.—Bids until April 6 to improve about 3.5 mi. of road; novaculite, gravel or crushed stone for finishing surface and is to be compacted with roller; probably use concrete in construction of smaller bridges and large culverts; bids invited on all kinds of culvert pipe and will be determined by Highway Comms. when prices are received; bids received for entire work or for part of same, consisting of grading, bridging, surfacing and furnishing material necessary; plans, profiles and specifications on file with Chanery Clerk, Booneville; Xavier A. Kramer, Engr., Magnolia, Miss., and Highway Comm., Booneville; blank proposal forms furnished on application to Com. or Engr.

Road Machinery.—Dist. Comms., 509 District Bldg., Washington, D. C.—Bids until Mch. 20 to furnish and deliver road roller of tandem type, driven by steam and to weigh about 8 tons; for use in surface division; specifications and form of proposals obtainable from purchasing officer, Room 320, District Bldg.

Roofing.—E. L. James, R. F. D. Winston-Salem, N. C.—Prices on shingle and other kinds of roofing delivered Colfax, N. C.

Sawmills, etc.—Race Paths Gin Co., T. Whitaker, Secy., Route 1, Ellenboro, N. C.—Prices on sawmills, suction systems.

Sawmill Machinery.—J. E. Lusk, Pleasant Grove, Mfg. Co., Pleasant Grove, Miss.—Prices and catalogues on machinery to cut and manufacture lumber.

Sewers.—T. H. Briggs, Mayor, Gilmer, Tex.—Bids until April 2 to construct sewer system consisting of 900 ft. 12-in., 1400 ft. 10-in., 6900 ft. 8-in. and 7000 ft. 6-in. vitrified sewer pipe; 34 manholes, 2 flush tanks and reinforced concrete sewage treatment tank; plans and specifications at City Hall and office of Nagel & Petersen, 308 Courthouse Bldg., Muskogee, Okla.

Sewers.—See Water-works and Sewers, Fla., Punta Gorda.

Sewer Construction.—Chas. E. Bolling, City Engr., Richmond, Va.—Receives bids

until Mch. 20 to construct concrete sewer along Bacon Quarter Branch; length 800 ft.; section No. 2; information, plans, specifications and proposal forms obtainable from City Engr.'s office; contractor to furnish, at time of bidding, samples of materials.

Sewer Construction.—See Paving, etc. **Slab Resaw.**—Waverly Cooperage & Ice Co., Waverly, Va.—Prices on small slab resawing machine to resaw slabs not over 10 in. wide, 4 in. thick at thick end and 18 in. long; circular saw preferred.

Sewer Construction.—Board of Affairs, J. T. Akers, Auditor, Bluefield, W. Va.—Bids until April 3 to construct 15-in. vitrified sanitary sewer from present sewer in South Bluefield to Graham, Va.; length 17,000 ft.

Sewer Construction.—Board of Awards, Baltimore, Md.—Bids until Mch. 25 at office of Richard Gwinn, City Register, City Hall, to construct section No. 1 of Ferry Point trunk sewer, Sanitary Contract No. 122; 200 lin. ft. 27-in. diam. sewer and 700 cu. yds. earth excavation; specifications and plans obtainable at office of Sewerage Com., Harry W. Rodgers, Secy., 904 American Bldg.; charge of \$5 for each set of specifications and blueprints, to be refunded upon return on or before Mch. 25 of unused specifications and plans.

Sewer Construction.—Board of Awards, Baltimore, Md.—Bids until April 1 at office of Richard Gwinn, City Register, City Hall, to construct lateral sewers and house connections in Dist. No. 7, Sanitary Contract No. 123; 13,350 lin. ft. 3-in. to 15-in. diam. sewer and 11,500 lin. ft. vitrified pipe house connections in trench; specifications and plans obtainable from Harry W. Rodgers, Secy. of Sewerage Com., 904 American Bldg.; charge of \$5 for each set of specifications and blueprints, to be refunded upon return on or before April 1 of unused specifications and plans; Chas. England, Chmn., Sewerage Com.

Sewers, etc.—Walter G. Franz, Consult. Engr., Union Trust Bldg., Cincinnati, O.—Bids to install sanitary sewer system and sewerage disposal plant for Tuskegee Normal and Industrial Institute, R. R. Taylor, Director of Industries, Tuskegee Institute, Ala.; plans and specifications at offices of Consult. Engr. and R. R. Taylor.

Sewer System Equipment.—See Water-works Equipment, etc.

Sawing Machinery.—See Slab Resaw.

Shackle Rods.—Moccasin Tracks Oil & Gas Co., H. H. Harbison, Sapulpa, Okla.—Probably prices on shackle rods.

Shear.—Pennsylvania Equipment Co., West End Trust Bldg., Philadelphia, Pa.—Prices on shear, capacity 6 in. by 3 in. cold.

Sheet Metal.—F. N. (Taylor) Cummings, Claremont, Va.—Wholesale prices on galvanized sheet metal.

Shingles.—J. E. Kenerly, Winston-Salem, N. C.—Prices and samples on asbestos shingles.

Steel Band.—Daniel W. Adams, Ch. Engr., White Coal Power Co., Old Fort, N. C.—Prices on 100,000 ft. 1-in. to 18-in. gauge steel band.

Steel Cells.—Clay County Supvs., L. J. Howard, Clerk, West Point, Miss.—Bids Apr. 6 on steel convict cages.

Steel Front.—W. V. Prillaman, Box 231, Southern Pines, N. C.—Prices on steel front for garage 50x100 ft.

Steel, etc.—Isthmian Canal Com., F. C. Boggs, Gen. Purchasing Officer, Washington, D. C.—Bids until April 3 to furnish sheet steel or iron, water-level indicator recorders, hose, water coolers, steel tapes, thumb tacks, rubber bands, paper clips, unslaked lime, lard oil, creosote oil, metallic brown, black asphaltum varnish, switch ties and untreated piles; blanks and general information relating to this circular (No. 835) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans, and 1066 North Point St., San Francisco; also from U. S. Engr. offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Commercial Club, Tacoma, Wash.

Steel Filing Cases.—E. C. Wurzelow, Clerk of Court, Houma, La.—Bids on steel filing cases for vaults of clerks of courts for filing records; also names and addresses of manufacturers of same.

Steel Towers.—Navy Dept., Bureau of Yards and Docks, H. R. Stanford, Ch. of Bureau, Washington, D. C.—Bids until Mch.

28 to construct 4 steel towers on Canal Zone; separate proposals received for steel work and foundation; plans and specifications on application to bureau.

Structural Steel.—Navy Dept., Bureau of Yards and Docks, H. R. Stanford, Ch. of Bureau, Washington, D. C.—Bids until Mch. 28 to erect structural steel work for coaling plant, Pearl Harbor, Hawaii; cost \$60,000; plans and specifications on application to bureau or commandant of naval station named.

Suction Line.—Bureau of Yards and Docks, H. R. Stanford, Chief, Navy Dept., Washington, D. C.—Bids until April 11 for changing salt-water suction line, including deepening of screen pit and suction well at Naval Training Station, Newport, R. I.; specification No. 2058; estimated cost, \$2300; plans and specifications obtainable from bureau or commandant of naval station.

Tile.—J. M. Rouse, 1049 Trimble St., Paducah, Ky.—Prices on tile for \$12,000 court-house.

Tramway.—Frank Wright, Cave Springs, Ga.—Prices on yard tramway. (See Building Materials.)

Tramway.—Pensacola Excelsior Co., M. G. Hoffman, Prest., 408 Thiesen Bldg., Pensacola, Fla.—Prices on small tramway system to convey cord wood from yard to factory; car to hold from 3/4 to 1 cord wood; also prices on turning table.

Turning Table.—See Tramway.

Vault.—Farmers' State Bank, Chesterfield, Mo.—Prices on vault.

Veneer Machine.—Anthony S. Hill, 746 Randolph Bldg., Memphis, Tenn.—Prices on rotary veneer lathe, second-hand, with blade from 44 in. to 54 in. Coe or American preferred, and one clipper to match.

Wagon Spindles.—Henderson Mfg. Co., Henderson, N. C.—Addresses of manufacturers of turned hardwood spindles to manufacture spindle bodies and seats for buggies, etc.

Water Meters.—Board of Bond Trustees, Frank Richardson, Chmn., Jacksonville, Fla.—Bids until April 6 to furnish and deliver f. o. b. Jacksonville from time to time as needed, 3000 (more or less) water meters for Jacksonville water-works; contract to be made for a period of 12 calendar months. For further information apply to L. D. Smoot, Commr. of Public Works.

Waterproofing.—Daniel W. Adams, Ch. Engr., White Coal Power Co., Old Fort, N. C.—Prices on waterproofing.

Water-works.—M. J. Alexander, Clerk, Tunica, Miss.—Bids April 7 to construct water-works; plans and specifications in office of Clerk.

Water-works and Sewers.—City of Punta Gorda, Fla., J. F. Corbett, Clerk of Board of Bond Trustees.—Bids until Mch. 24 to furnish material and labor and construct water-works and sewers; W. P. Bullock, Engr., 3600 Gladstone St., Kansas City, Mo.

Water-works Equipment, etc.—City of Mansfield, La., J. W. Parsons, Mayor.—Bids until Mch. 24 to furnish material required in construction of water-works and sanitary sewers: 2 80-H. P. return tubular boilers; feed water heater, 100 H. P.; 2 boiler feed pumps; compound duplex pump, 500 gal. per minute; simple duplex pump, 500 gal. per minute; 60 standard fire hydrants; 14 4-in. water gate valves, with extension boxes; 11 6-in. water gate valves, with extension boxes; 21 8-in. water gate valves, with extension boxes; 4 12-in. water gate valves; 10,800 ft. 4-in., 5000 ft. 6-in., 14,400 ft. 8-in. and 162 ft. 12-in. cast-iron pipe and fittings; 9260 ft. 6-in., 3180 ft. 8-in., 2325 ft. 10-in., 1100 ft. 12-in. and 4500 ft. 15-in. salt glazed sewer tile and fittings; 6 Miller-Potter flush tanks; 6 IXL flush tanks; 41 man-hole rings and covers; 4 15-in. shear valves.

Well Drilling.—Upurdy Oil Co., O. O. Cox, 100 E. California Ave., Oklahoma City, Okla.—Prices, etc., on rigs for drilling from 800 to 1800 ft.

Well-drilling Equipment.—H. & S. Oil & Gas Co., Geo. C. Boland, Prest., Sulphur, Okla.—Probably prices on drilling equipment.

Welding Equipment.—Skiatook Garage Co., W. J. Schafer, Prest., Skiatook, Okla.—Prices on autogenous welding outfit.

Wheel Scrapers.—Holt Construction Co., Denton, Md.—Prices on wheel scrapers.

Wire Fencing, etc.—E. L. James, R. F. D. Winston-Salem, N. C.—Prices on wire fencing and wire delivered Colfax, N. C.

Woodworking Machinery.—F. N. (Taylor) Cummings, Claremont, Va.—Prices on small machinery for working up small waste lumber.

Wood Preserving Plant.—F. N. (Taylor) Cummings, Claremont, Va.—Prices on pressure and tank or steam preserving wood preserving plant.

FINANCIAL NEWS

The MANUFACTURERS RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Two Corporation Changes.

The Greensboro (N. C.) Loan & Trust Co. of Greensboro, N. C., according to a report from there, has absorbed the Home Savings Bank of that place and will merge it into its savings department. J. W. Fry is president of the trust company. J. S. Cox vice-president and W. E. Allen secretary and treasurer.

The Hibernia Insurance Co. of New Orleans, says a report from there, has passed into the hands of the Home Insurance Co. of New York, having reinsured its business with that corporation, so that the affairs of the Hibernia will be liquidated and wound up. It is said that the company was doing a profitable business, but that its limited field and almost local operations did not warrant jeopardizing its assets. There is a surplus of \$263,250 over all liabilities. The price paid by the purchasing company is said to have been quite satisfactory. The business will be carried on by an agency of the Home Insurance Co.

Arkansas Bank Changes.

A report from Fort Smith, Ark., says that John R. Brown of Van Buren, Ark., and E. E. Cooper of New York have bought control of four banks in Crawford county, viz.: Citizens' Bank of Van Buren, Bank of Mulberry, Bank of Rudy and Bank of Alma, Ark., the three latter being controlled by the Citizens'. It is understood that Mr. Cooper will be president and Mr. Brown cashier of the Citizens' Bank.

It is further said that George R. Wood, Phil T. Scott and Laban H. Southmayde, Sr., who sold the control of the four banks, have since bought control of the First National Bank of Van Buren, and that Mr. Wood will become its president.

Bank Report.

The statement of the First National Bank of Richmond, Va., March 4 shows total resources of \$18,114,740.88, which includes loans and discounts of \$12,512,991.24; United States bonds, \$1,891,500; other stocks and bonds, \$817,266.78, and cash and due from banks, \$2,813,555.11. Capital is \$2,000,000; surplus, \$1,000,000; undivided profits, \$90,953.13; deposits, \$12,151,329.36. John B. Purcell is president; John M. Miller, vice-president; W. M. Addison, cashier, and Charles R. Burnett, W. P. Shelton, Alex. F. Ryland, J. C. Joplin, O. S. Morton and John Tyler, assistant cashiers, and Jas. M. Ball, Jr., auditor.

FINANCIAL CORPORATIONS

Ala., Bessemer.—United States Savings Bank of Bessemer, authorized capital \$100,000, paid in capital \$36,000, has filed incorporation papers; office 1930 Second Ave. W. W. Hollingsworth is Prest.; L. B. Bradley, V.-P.; G. B. Hollingsworth, Cash, and Secy.

Ala., Pell City.—Lafayette Cook and W. F. Cook are organizing a new bank with \$15,000 capital and an equal surplus.

Ala., Centerville.—People's Bank, a new concern, will incorporate with authorized capital \$50,000, paid-up capital \$35,000, with which it will begin business. It is expected, July 1. J. W. Hunnicutt is Prest.; W. C. Fuller, V.-P.; L. Melton, Cash. Other direct-

ors are J. F. Thompson, M. G. Cruise, S. C. Melgs and W. H. Cooper.

Ark., Magnolia.—Davis Loan & Investment Co. of Magnolia is chartered; capital \$25,000. J. L. Davis is Pres.; M. J. Davis V.-P., and D. M. Davis, Secy.-Treas.

Ark., Texarkana.—Miller County Bank & Trust Co., capital \$300,000, surplus \$5000, will begin business about April 1. Incorporators are W. T. Murphy, T. F. Booker, J. H. Forbes and J. M. Wycht, all of Texarkana, and W. E. Carter of Nashville, Ark. (See Manufacturers Record March 12.)

D. C., Washington.—Franklin National Bank, capital \$200,000, is approved; organizers, R. S. Turk, Chas. H. Weser, Vincent L. Toomey, J. Fendall Cain, T. P. Hickman and E. R. Adams.

Fla., Miami.—Rose Investment Co., capital \$25,000, will apply for charter April 6, with headquarters at Miami, to deal in real estate, etc. A. J. Rose is Pres., F. T. Phillips V.-P., and Leila M. Given Secy.-Treas.

Fla., Pensacola.—Pensacola Guaranty Co., capital \$3000, publishes charter. Incorporators are T. F. McNeal, Pres.; G. W. Houseman, V.-P.; C. G. Lague, Secy.-Treas.

Fla., Williston.—Citizens' Bank of Williston, a new concern, is chartered; capital \$18,000; will begin business about May 1. J. R. Epperson is Pres.; O. P. Hester, V.-P.; C. F. Chapman, Cash.; L. C. Hester, T. J. Cone, H. L. Gray, Chas. A. Faircloth are the other directors.

Ga., Macon.—Georgia Life Insurance Co., according to a decision of the Georgia Supreme Court, may legally change its name to the Georgia Casualty Co. and reduce its capital from \$500,000 to \$300,000, crediting the other \$200,000 to surplus account. W. F. Small is Pres.

Ga., Rhine.—Citizens' Bank of Rhine, capital \$25,000, is chartered; incorporators, O. J. May, A. J. Yancey, William Mizell, Archie Coffey, J. O. Stuckey, G. M. Burnham and W. H. Dowdy, all of Rhine.

Ga., Rome.—Petition has been filed to incorporate the C. B. Goetcheus Realty & Loan Co. of Rome; capital \$12,000; incorporators, John H. Reynolds, N. N. Burnes, E. E. Holder and C. B. Goetcheus, all of Floyd county, Georgia, and the Southern Securities Co. of North Carolina.

Ga., Sycamore.—The Planters' Bank, a new concern, is chartered and organized and will begin business about April 15; capital \$25,000. W. D. Fountain is Pres.; J. R. Brown, Jr., V.-P., and R. A. Scarborough Cash.

Ky., Louisville.—Three Trades Fire Insurance Co. is organized with directors thus: Capt. I. P. Eriard, Pres.; David A. Keller, V.-P.; Caldwell Norton, Treas.; Robert B. Green, Secy.; Wm. Colgan, Asst. Treas.; Clayton B. Blakey, Atty.; Laban Phelps, James C. Bright and James L. Snyser. A. J. Heller is organizing manager.

Ky., Louisville.—Metropolitan Fire Insurance Co. of Kentucky, capital \$500,000, is reported organizing with G. W. Long of Louisville, Pres.; W. L. Hazelp of Louisville, 1st V.-P.; O. H. Skiles of Frankfort, 2d V.-P.; S. R. Glenn of Lyon county, 3d V.-P., and Edwin G. Morgan, Secy. and Treas. Other directors are Smith T. Bailey, John M. Davis, John P. Haswell, Jr., W. L. Doolan, Dr. Wm. Phillips, J. W. Herring, G. B. Stopher and D. H. Russell of Louisville, and G. L. Green of Hardinsburg, Ky.

Ky., Louisville.—Lincoln Savings and Building Association, capital stock \$100,000, is incorporated by Harry B. Towle, C. A. Nelson, Homer C. Wahking, Henry Pirtle, Charles L. W. Daubert, T. N. Williams, William G. Hagman, T. Reichart, E. H. Speckman, H. N. Swearingen, S. W. Stopher, L. F. Speckman, S. S. Jones and C. W. Samuels.

Ky., New Castle.—New Castle Building and Loan Association is chartered; capital \$50,000; incorporators, C. Harrison, J. M. Guthrie and E. A. Gullion.

La., New Orleans.—Jackson Building and Loan Association is a change of name of the Teutonia Loan & Building Co., capital stock \$5,000,000. Jacob Neimaber is Pres., and Dan J. Chevalley, Secy.

La., New Orleans.—Louisiana Abstract & Title Insurance Co., capital \$400,000, will begin business May 1. Felix J. Dreyfous is Pres.; P. H. Saunders, W. W. Bouden, P. M. Lamberton and F. Dietze, Jr., V.-Ps.; Herman Weil, Treas., and M. P. Bouslog, Secy.-Mgr. Other directors are Lynn H. Dinkins, Solomon Wolf, Alfred D. Danziger, Edward Wisner, Chas. de B. Claiborne, Eldon S. Lazarus and Meyer Elseman.

Md., Baltimore.—Maryland Finance Co., capital \$10,000, is inceptd. to deal in mortgages and other securities and to issue

bonds. The directors, who are connected with the Fidelity & Deposit Co., of which Mr. Warfield is president, are thus: Edwin Warfield, Stephen W. Gambrell, Henry W. Williams, William E. P. Duvall, Samuel M. Hann, George H. Grist, William B. Athey, William R. Bishop and Thomas L. Berry. Officers are: Pres., Edwin Warfield; V.-P., Stephen W. Gambrell; Secy., Fred S. Axtell; Treas., William E. P. Duvall, and counsel, Henry W. Williams.

Md., Baltimore.—A bill has been introduced in the Legislature by Senator Watkins to incorporate the Tidewater Bank of Maryland; capital \$25,000, which may be increased to \$500,000. Incorporators: Luther L. McKenney, H. Addison Booth and J. Henry Marchant of Baltimore; J. Frank Shipley of Baltimore county and J. Leroy Jaquette of Kent county.

Md., Hagerstown.—Maryland Title, Insurance & Securities Co., capital \$100,000, is incorporated at Hagerstown.

Miss., Itabena.—First National Bank, capital \$25,000, has applied for authority to organize. J. F. Russell, G. B. Clover, C. C. Moore, T. P. Kimbrough and E. B. Pearce are interested.

Miss., Jackson.—Jackson National Bank, a conversion of the Jackson Bank, has applied for authority to organize; capital \$100,000. O. Newton, Jr., is Pres., and M. S. Craft, Cash.

Mo., Chesterfield.—Farmers' State Bank, capital \$10,000, is chartered; will begin business about June 1; incorporators, Edward Burkhardt, H. A. Kraus, Dr. J. L. Defoe, John Bayer, Oscar Linn, E. W. Zirnberg and W. S. Ficke.

N. C., Hillsboro.—A movement is reported in progress to establish a \$10,000 bank at Hillsboro. The Mayor may be able to give information.

N. C., Leaksville.—Union Mutual Life & Health Insurance Co. of Leaksville, no capital stock, is inceptd. by T. W. Dunn, J. C. Harris, T. C. Sharp, A. T. Hopper, J. M. Hopper, W. A. Dunn, P. H. Gwynn, G. C. Gammon, A. W. Dunn and J. W. Norman, all of Leaksville.

N. C., Mocksville.—Merchants & Farmers' Bank of Mocksville is the name of the new financial concern just chartered; capital \$20,000. Will begin business about April 1. J. L. Armfield of Thomasville, B. O. Morris and O. L. Williams of Mocksville and others are the organizers.

S. C., Simpsonville.—Farmers' Bank of Simpsonville, capital \$25,000, is granted a commission; petitioners, James M. Richardson of Fountain Inn, J. D. Richardson of Simpsonville and D. L. Brannett of Seneca.

N. C., Statesville.—Methodist Mutual Fire Insurance Co. has organized by electing directors thus: Revs. C. W. Byrd and H. M. Blair of Greensboro; J. F. Kirk and L. T. Mann of Statesville; J. W. Jones of Mooresville, and W. F. Womble of Hendersonville; also E. A. Cole of Charlotte, John A. Young of Greensboro, Dorman Thompson of Statesville and J. F. Shinn of Norwood. E. A. Cole was elected Pres., Dorman Thompson V.-P., and W. E. Webb of Statesville Secy. and Treas. Rev. J. W. Jones of Mooresville is general agent. Office at Statesville in the Morrison Bldg.

Okla., Ada.—Merchants & Planters' National Bank, capital \$50,000, a conversion of the Merchants & Planters' State Bank, has applied for authority to organize. C. H. Rives is Pres., and H. P. Reich, Cash.

Okla., Madill.—Marshall County Building and Loan Asso. of Madill, a new concern, is inceptd.; capital \$100,000. Began business March 15. Directors are M. Scott, Pres.; George Wylie, V.-P.; A. P. Marsh, F. J. Carter, Ed. Creekmore and David Russell. W. H. Baldwin is Secy. and F. B. Herron, Treas.

Okla., Norman.—Security State Bank of Norman, capital \$30,000, is chartered. Incorporators are C. H. Besseur and S. A. Ambler of Norman, and J. D. Baisan of Oklahoma City.

S. C., Charleston.—South Carolina Loan & Trust Co. Bank, capital \$50,000, is chartered. John F. Ficken is Pres. and Henry H. Ficken Secy. and Treas. This, it is understood, is a conversion of the King St. branch of the South Carolina Loan & Trust Co.

S. C., Conway.—Conway National Bank is reported organizing by the consolidation of the Conway Savings Bank, the First National Bank and the Bank of Horry. Capital stock is \$100,000. The merger, it is said, will be completed about April 15, with Robert B. Scarborough, Pres.; Hal L. Buck, 1st V.-P.; W. A. Johnson of Savannah, 2d V.-P.; D. V. Richardson, 3d V.-P., and Will A. Freeman, Cash.

S. C., Fowler.—Cooper Bros. Investment

Co., capital \$30,000, is granted a commission. Petitioners are H. M. Cooper, T. M. Cooper and J. F. Cooper.

Tenn., Covington.—First National Bank of Covington, a new concern, capital \$60,000, began business March 2. J. H. Flippin is Pres.; A. P. Smith and A. Boyd, Jr., V.-Ps.; E. L. Worrell, Cash., and B. S. Jamison, Asst. Cash. The board of directors is composed of the first four officials and M. A. Ray, Dr. H. K. Templeton, L. Y. Cobbs, C. P. Simonton, C. P. Boals, L. P. Flippin, B. M. Robinson and I. H. Lowenbaugh.

Tenn., Cumberland City.—W. H. Scarborough and others are reported organizing another bank for Cumberland City.

Tenn., Maryville.—First National Bank of Maryville, capital \$50,000, is approved; organizers, D. B. Goldard, J. H. Staley, H. C. Kopeke, J. H. Mitchell and J. H. Webb.

Tex., Beaumont.—Guaranty Bank & Trust Co., capital \$100,000, has been granted a charter. It will begin business soon. T. H. News and others are interested.

Tex., Dallas.—A new trust company is being organized by C. C. Slaughter, W. B. Slaughter, C. C. Slaughter, Jr., and others.

Tex., Groesbeck.—Williams & Bradley Abstract Co. of Groesbeck, capital \$10,000, is chartered by J. E. Bradley, J. B. Franklin and C. S. Bradley.

Tex., Harwood.—First State Bank of Harwood, a new concern, capital \$10,000, will begin business as soon as charter is granted. Directors are L. G. Dexter, Pres.; Chester Cochran, V.-P.; F. Jansen, Cash.; G. N. Lankin, W. C. Boulden, Jr., E. J. Pennell and J. C. Renschel.

Tex., Moran.—First National Bank of Moran is approved; capital \$25,000; organizers, T. E. Powell of Baird, Tex.; S. L. Driskill, P. G. Hatchett, C. B. Snyder and B. L. Boydston.

Tex., Oklahoma.—First Guaranty State Bank of Oklahoma, capital \$10,000, has been granted a charter.

Tex., Waco.—Texas Guarantee Bank & Trust Co. of East Waco is reported organized with Handy H. Holt Pres. and W. E. Griffiths Cash.

Va., Big Stone Gap.—Southwest Insurance Agency of Big Stone Gap is incorporated; capital \$10,000. C. S. Carter is Pres.; W. S. Beverley, V.-P.; A. L. Witt, Treas., and J. B. Wampler, Secy., all of Big Stone Gap.

Va., Mears.—Merchants & Truckers' Bank of Mears is incorporated; capital \$10,000 to \$50,000. Incorporators: Albert F. Mears, Littleton J. Byrd, Leonard W. Chase, Nettie Mears and Thomas A. German, all of Accomac county. Albert F. Mears is Pres. and Nettie Mears Secy. Will begin business in April.

Va., Norfolk.—Investment Real Estate Corporation of Norfolk is chartered; capital \$10,000. J. W. Phillips is Pres.; D. Carpenter, V.-P., and D. M. Agey, Secy. and Treas.

Va., New Market.—First National Bank of New Market, capital \$25,000, has applied for authority to organize. W. P. Crickenberger, R. D. Grobhill, J. D. Manor, H. M. Hinkel and C. H. Moore are interested.

NEW SECURITIES

Ala., Birmingham.—\$109,000 of 5 per cent. public improvement bonds have been sold to the Equitable Life Insurance Society.

Ala., Ozark.—Bids will be received until June 1 for \$25,000 of 5 per cent. 30-year water and light improvement bonds; denomination \$1000. Address J. A. Eason, Mayor.

Ark., Marion.—\$1,165,000 of bonds of the St. Francis Levee District are to be sold soon, this being the balance of an issue of \$1,500,000, there having been \$335,000 sold to Lee Wilson and T. K. Riddick of Memphis. Address A. N. Killough, Pres. of the Advisory Board.

Ala., Thomasville.—An election on a proposed issue of water and sewer bonds is reported about to be held. Address The Mayor.

Ark., Van Buren.—\$9000 of 6 per cent. 14-year sewer bonds are reported sold to a St. Louis house at 98 1-8, purchaser to pay legal costs.

Fla., Brooksville.—Bids will be received until noon April 7 for \$250,000 of highway and \$50,000 courthouse funding bonds of Hernando county, 5 per cent., 30-year. H. D. Evans is Chrmn. County Comms. and M. H. Snow, Clerk. Further particulars will be found in the advertising columns.

Fla., DeLand.—The bonds proposed by the City Council and for which an election will have to be held, if the Council approves

them, total \$305,000, thus: Streets, \$110,000; storm water sewers, \$45,000; sanitary sewers, \$5000; water-works improvements, \$15,000; street improvement, \$5000; to retire outstanding bonds, \$25,000.

Fla., Marianna.—Bids will be received until noon March 17, it is reported, for \$100,000 of 5 per cent. 37½-year Jackson county road bonds. E. B. Erwin is Clerk.

Fla., Miami.—\$150,000 of 5 per cent. school bonds of Dist. No. 2, Dade county, have been voted. Address R. E. Hall, Supt. of Public Instruction.

Fla., Ocala.—Bids will be received until 2 P. M. April 8 for \$75,000 of 5 per cent. 30-year bonds of Special Tax School Dist. No. 1 of Marion county; denomination \$1000. Address J. H. Brinson, Secy. Board of Public Instruction. Further particulars will be found in the advertising columns.

Fla., Orlando.—Bids will be received until noon Apr. 6 for \$100,000 of 5 per cent. 30-year street-paving bonds, denomination \$500. Address Bond Trustees E. G. Duckworth, D. Lockhart and J. T. Hendricks. Further particulars will be found in the advertising columns.

Fla., Palmetto.—The \$85,000 of improvement bonds for which bids will be opened March 19 are as follows: \$50,000 for streets, \$17,000 for sewers and \$18,000 for waterworks. Address The Mayor.

Fla., Passagrille.—Bids will be received until 10 A. M. March 29 for the \$11,000 of water-works, electric light, sea wall and other bonds; 6 per cent., 30-year. James Henry is Town Clerk.

Fla., St. Petersburg.—\$25,000 of gas-plant bonds are reported voted. Address The Mayor.

Fla., West Palm Beach.—Bids will be received until noon Apr. 7 for \$45,000 of 5 per cent. 30-year bonds of Road and Bridge Dist. No. 2 of Palm Beach county, this being part of an issue of \$60,000; denomination \$500. R. H. Rousseau is Chrmn. and Geo. O. Butler, Clerk of the County Comms.

Ga., Alamo.—The \$10,000 of (water-works \$2500 and school \$7500) bonds bought by the Wheeler County Bank of Alamo are 20-year 6 per cents, and the price paid was par.

Ga., Chickamauga.—\$15,000 of 5 per cent. 30-year school-building bonds have been voted; denomination \$500. Date for receiving bids will be fixed after validating the securities. Address Tom W. Lee, Mayor.

Ga., Columbus.—City will offer for sale April 25 \$90,000 of 4½ per cent. bonds. Address Jno. C. Cook, Mayor. Further particulars will be found in the advertising columns.

Ga., Moultrie.—Bids will be received until noon March 21 for the \$60,000 of city bonds recently voted for paving, sewers and schools; 5 per cent., 30-year. George H. Kline is Mayor.

Ky., Cynthiana.—An ordinance is being prepared for an election on \$15,000 of school-building bonds. Address The Mayor.

Ky., Elizabethtown.—Election is called for March 28 on \$20,000 or \$25,000 of school bonds. Address District School Trustees.

Ky., Morgantown.—Seasongood & Mayer of Cincinnati are reported to have bought for \$9080 the \$9218 of 6 per cent. 5-10-year street-improvement bonds.

Ky., Paducah.—\$2714 of 6 per cent., 5½-year average, sidewalk bonds have been sold at par to G. W. Katterjohn and Christ. Musselman of Paducah.

La., Alexandria.—\$125,000 of 5 per cent. 26-year school bonds of Dist. No. 1, parish of Rapides, are voted. Address Jonas Rosenthal, Pres. School Board.

La., Baton Rouge.—East Baton Rouge parish will hold election Apr. 11 on \$186,000 of 5 per cent. 27-year bonds of Road Dist. No. 2. Address County Comms.

La., Donaldsonville.—\$90,000 of improvement bonds of Bayou Conway Drainage Dist. are to be sold. Address Drainage Comms.

La., Napoleonville.—Tioga Gravel Co. of Alexandria, contractor, has purchased the \$80,000 of 5 per cent. road certificates of Assumption parish.

La., Shreveport.—Election is called for Apr. 15 on \$1,000,000 of 4½ per cent. water-works bonds. Address The Mayor.

Md., Annapolis.—Bids will be received until 11 A. M. March 31 for \$10,000 of Stoney Creek bridge bonds, 5 per cents., serials, Anne Arundel county; denomination \$500. Address S. Ogle Tilghman, Clerk to County Comms.

Md., Elkton.—This (Cecil) county contemplates issuing \$100,000 of courthouse bonds. Address County Commissioners.

Md., Prince Frederick.—A bill has been introduced in the Legislature by Senator Duke

to authorize Calvert county to issue \$25,000 of courthouse bonds. Address County Commissioners.

Mo., Thurmont.—A bill for introduction in the Legislature has been prepared to secure an issue of \$36,000 of bonds for school building at Thurmont. Chas. McC. Mathias or C. C. Waters of Thurmont may give information.

Miss., Canton.—Bids will be received until April 6 for \$100,000 not over 6 per cent. 25-year bonds of First Supvrs. District of Chickasaw county to build roads; denomination \$500. H. E. L. Brannon is Chancery Clerk. Further particulars will be found in the advertising columns.

Miss., Hickory.—Bids will be received until May 1 for \$10,000 of 6 per cent. 20-year school bonds. Address M. J. Scarborough, clerk Board of Education.

Miss., Houston.—Bids will be received until April 6 for \$100,000 not over 6 per cent. 25-year bonds of First Supvrs. District of Chickasaw county to build roads; denomination \$500. H. E. L. Brannon is Chancery Clerk. Further particulars will be found in the advertising columns.

Miss., Kosciusko.—Bids will be received until noon April 7 for \$50,000 of 5-20-year Attala county bonds at 5, 5½ and 6 per cent. interest. Address J. H. Oliver, Clerk to Board of Supvrs. Further particulars will be found in the advertising columns.

Miss., Jackson.—A bill is before the Senate Finance Committee to provide for an issue of from \$1,250,000 to \$1,500,000 of State bonds at 4½ per cent. Further particulars will be found in the advertising columns.

Miss., Meridian.—It is stated that the city will issue \$15,000 of 5 per cent. bonds to take up a school loan 20 years old which matures May 1, but that the new securities will be purchased for the municipal sinking fund. Address The Mayor.

Miss., Newton.—An election is to be held March 24 on road bonds. Address Board of Supvrs. of Newton County, Decatur, Miss.

Miss., Oxford.—\$2500 of bonds of Taylor School Dist., Lafayette county, are reported sold to H. M. Noel Co., St. Louis, at par.

Miss., Port Gibson.—Bids will be received by the Supvrs. of Claiborne County at 2 P. M. April 6 for \$10,000 of 5 per cent. 20-year bridge bonds; denomination \$1000. Address B. H. Morehead, Clerk.

Miss., Vicksburg.—Bids will be received until noon Apr. 6 for \$160,000 (total issue \$300,000) of 5 per cent. Warren county road and bridge bonds; denomination \$1000; serials. Address J. D. Laughlin, clerk Board of Supvrs.

Mo., Auxvasse.—\$16,000 of school bonds are reported voted. Address The Mayor.

Mo., Cairo.—\$5000 of school-building bonds are reported voted. Address The Mayor.

Mo., Cartersville.—\$20,000 of school-improvement bonds will be voted upon on April 7. Address Board of Education.

Mo., Cassville.—\$13,250 of 6 per cent. 3-20-year optional school-building bonds have been voted. Address The Mayor.

Mo., Charleston.—\$47,500 water and \$36,000 sewer 5 per cent. 13½-year advance bonds are reported sold to Kissell, Kinnicutt & Co., Chicago, at 102.935.

Mo., Chillicothe.—\$25,000 of 5 per cent. school building bonds were sold to A. G. Edwards & Sons of St. Louis at a premium of 970.

Mo., Clayton.—Defeated: Proposition to issue \$75,000 of school building bonds. Wm. Seibel is Clerk of St. Louis county.

Mo., Eldon.—\$18,500 of high school building bonds are reported voted. Address The Mayor.

Mo., Keytesville.—\$15,000 of school-building bonds were recently voted. Address The Mayor.

Mo., Kirkwood.—\$15,000 of firehouse and jail bonds are to be voted upon on Apr. 7. Address The Mayor.

Mo., Maplewood.—Election on \$100,000 of sewer bonds is reported called for March 19. Address The Mayor.

Mo., New Madrid.—\$50,000 of 5 per cent. 4½-year optional courthouse and jail bonds of New Madrid county were sold to the Wm. R. Compton Co. of St. Louis at a premium of 1835.

N. C., Andrews.—\$75,000 of 5½ per cent. township bonds are offered for sale. Address S. E. Cover.

N. C., Clayton.—The securities offered Mch. 12 are \$25,000 of 5 per cent. 30-year school site and building bonds; denomination \$1000. R. R. Guley is Secy., School Board.

N. C., Gastonia.—\$100,000 of 30-year city bonds have been sold to the Citizens' National Bank of Gastonia at a premium of \$1050.

N. C., Graham.—All bids for \$50,000 of 5 per cent. street bonds recently offered were rejected, not complying with conditions. Address R. G. Foster, Town Secy.

N. C., Greensboro.—City Commrs. contemplate calling an election on \$50,000 of bonds for streets, schools and public playground.

N. C., Hazlewood (P. O. Waynesville).—Time extended to Mch. 25 to receive bids for \$15,000 of water-works and electric light bonds. Address W. H. Cole, Chrmn., Finance Com.

N. C., Hayesville.—\$75,000 of 6 per cent. bonds of Clay county are being offered. Address G. H. Haigler.

N. C., Kings Mountain.—\$15,000 of township road bonds, Cleveland county, are reported voted. Address County Commrs., Shelby, N. C.

N. C., Lenoir.—Time for receiving bids for the \$25,000 of 5 per cent. 40-year road bonds of Lovelady township, Caldwell county, is reported extended from March 9 to March 23. Address John M. Crisp, Clerk to the County Commissioners.

N. C., Raeford.—\$15,000 of 5 per cent. 30-year school-building bonds are reported sold, and the remaining \$20,000 will not be offered now. Address The Mayor.

N. C., Rowland.—\$20,000 out of an authorized issue of \$25,000 of 6 per cent. 30-year school bonds are reported sold to the Hanchett Bond Co., Chicago.

N. C., Snow Hill.—\$10,000 of 6 per cent. 15-year road bonds of Hookerton Dist., Greene county, were awarded to the Bank of Hookerton at 105. The other six issues of different districts have not been sold. Address J. O. Sugg, Clerk to County Commrs.

Okla., Cordell.—An election is contemplated to be held some time in April on about \$50,000 of water-works bonds. Address The Mayor.

Okla., Salina.—An election is to be held April 4 on a proposed issue of bridge construction bonds. Address Gideon Morgan, Salina, Okla.

S. C., Columbia.—\$500,000 of water and sewer-extension bonds have been voted. Address W. H. Gibbs, Mayor.

S. C., Johnston.—An election is reported called for \$25,000 of school-building bonds for Dist. No. 11 of Edgefield county. Address County Commrs., Edgefield, S. C.

S. C., Norton.—\$3000 of 6 per cent. 20-year school-building bonds of Dist. No. 80 were sold at par to M. J. Bullock of Norton.

S. C., St. George.—Bids will continue to be received until Mch. 23 at 11 A. M. for \$2500 of 6 per cent. 10-year school-building bonds of Burns Dist. No. 22 of Dorchester county. Address J. Otey Reed, attorney.

Tenn., Alamo.—\$1200 of 5½ per cent. 16-year school bonds were sold at par to the Wheeler County Bank of Alamo.

Tenn., Athens.—An election will be held during the first week in April on \$30,000 of 5 per cent. 30-year funding and improvement bonds. Address John W. Bayless, Mayor.

Tenn., Benton.—Stacy & Braun, Toledo, O. (not Ulen & Co., Chicago), were the successful bidders for the \$24,000 of 5 per cent. Polk county high-school bonds, for which they paid \$101 premium. John H. Williamson is Chrmn. County Court.

Tenn., Brownsville.—Bids will be received until noon April 8 for \$12,000 of 30-year water-plant bonds of Brownsville at not over 5 per cent.; denomination \$500. Address N. B. Keathley, Mayor.

Tenn., Brownsville.—Bids will be received until noon Apr. 8 for \$121,700 of railroad-debt bonds of Haywood county at not over 5 per cent. and maturing serially until 1934; denominations \$500 and \$1000. Address James Tipton, Chrmn. County Court.

Tenn., Camden.—An election on \$20,000 of school bonds will, it is reported, be held March 20. Address The Mayor.

Tenn., Gainesboro.—\$100,000 of 5 per cent. good roads bonds of Jackson county have been sold at par to the New National Bank of Columbus, O. G. Lee McGlasson is County Clerk.

Tenn., Memphis.—Bids are invited until noon April 1 for \$40,000 of 4½ per cent. 20-year school site and building bonds; denomination \$1000. Address A. B. Hill, Secy. Memphis Board of Education.

Tenn., Nashville.—Estabrook & Co. of New York and Boston bought \$635,000 of 5 per cent. street-improvement bonds offered Mch. 10 at their bid of 102.43 and accrued interest, the premium being \$16,888.50.

Tenn., Oakwood (P. O. Knoxville).—It has been decided to postpone action towards issuing bonds for public improvements.

Tex., Albany.—\$16,000 out of an issue of

\$20,000 of 5 per cent. 10-40-year water-works bonds, denomination \$500, are offered, preferably at private sale. Address D. Miller, Mayor.

Tex., Austin.—The State Board of Education at its March meeting purchased school district bonds amounting to \$167,700, thus: Angleton, \$2500; Arlington, \$4000; Cal Allen, \$10,000; Hutchins, \$10,000; Lake View, \$6000; Matagorda, \$8000; New Braunfels, \$14,000; Rio Hondo, \$800; Sweeney, \$10,000; Theneys, \$4500; Tolar, \$12,000; Wellington, \$12,000; Cameron county No. 17, \$13,000; Harrison county No. 6, \$8000; Kent county No. 13, \$52,000; Limestone county No. 35, \$4000; Milam county No. 59, \$4000; Parker county No. 23, \$5000; Tarrant county No. 91, \$13,500; Wise county No. 92, \$6000; Burleson county No. 25, \$2000, and city of De Leon, \$2000.

Tex., Bastrop.—A movement is under way to hold an election for issuing \$70,000 of road and bridge bonds of Bastrop county. Address County Commrs.

Tex., Belton.—\$600,000 of road bonds of District No. 5, Bell county, will be offered for sale soon. Address W. S. Shipp, County Judge.

Tex., Bishop.—\$75,000 of school building bonds, it is reported, will be offered. Address School Trustees.

Tex., Brownsville.—\$20,000 of 5 per cent. 10-40-year bonds of Road Dist. No. 1, Cameron county, are reported sold.

Tex., Carrizo Springs.—\$20,000 of 5 per cent. school-building bonds of Dist. No. 3, Dimmitt county, are 20-40s; denomination \$1000. Address W. C. Moore, Hig Wells, Tex.

Tex., Charlotte.—Bids will be received at any time for \$20,000 of 5 per cent. 10-40 optional school-building bonds. Address J. F. Edwards, Secy. Board of Education.

Tex., Denton.—Election called for April 25 in Mustang Precinct of Denton county to vote on \$22,500 of road bonds. Address County Commrs.

Tex., El Paso.—Election is reported called for \$34,250 East Paso improvement district bonds. Address The Mayor.

Tex., El Paso.—An election is called for Apr. 14 on \$200,000 of 5 per cent. 20-40-year school-site and building bonds of the city of El Paso. C. E. Kelly is Mayor and C. W. Fassett City Clerk.

Tex., Galveston.—Concerning the \$375,000 of Galveston 5 per cent bonds for which bids were to be opened March 10, it is reported that bids will not be opened for 30 days, the city reserving the right to dispose of the bonds at private sale. John D. Kelly is Secy. to the City Commrs. A late report says that \$350,000 have been sold through Bulger, Masser & Williams on a commission of 1½ per cent., with option on the remainder (excepting \$25,000) at the same price. The bonds sold are \$200,000 for schools and \$150,000 for water and sewer extensions.

Tex., Greenville.—\$16,000 of 5 per cent. 40-year market-square bonds are approved by the Attorney-General. Address The Mayor.

Tex., Granger.—Election to be held April 7 on \$15,000 of sewer construction bonds. Address The Mayor.

Tex., Groveton.—Bids are asked until Mch. 23 on \$9000 of 5 per cent. 10-40-year school-building bonds. Address The Mayor.

Tex., Kaufman.—Forney Justice Precinct No. 2 of Kaufman county voted \$225,000 of road bonds; not \$250,000 as was previously reported. Address Henry Sparks, County Clerk.

Tex., Kaufman.—An election is now ordered for April 16 in Terrell Precinct of Kaufman county on \$300,000 of road bonds, on which date, as previously noted, Kaufman Precinct will vote on \$200,000 and Crandall Precinct on \$100,000. Address Henry Sparks, County Clerk, Kaufman, Tex.

Tex., Killean.—Election reported called for Mch. 24 on \$50,000 of road bonds for Killean Dist. of Bell county. Address County Commissioners, Belton, Tex.

Tex., McKinney.—Election is reported called for March 14 on \$65,000 of Frisco Road Dist. bonds, Collin county. H. L. Davis is County Judge.

Tex., Nederland.—\$35,000 of 5 per cent. 40-year drainage bonds for Precinct No. 4 of Jefferson County have been voted and are to be sold. C. H. Spurlock, C. F. Jackson and P. H. Teal, Nederland, are Drainage Commrs.

Tex., Plano.—An election on \$100,000 of road bonds for Plano Dist. of Collin County is called for April 11. Address County Commissioners, McKinney, Tex.

Tex., Quanah.—\$20,000 of 5 per cent. 40-year water-works bonds, denomination \$500, are being offered for sale. Address M. E. Kerrigan, Mayor. J. B. Robertson is City Secy.

Tex., Rocksprings.—\$15,000 of 5 per cent. 10-40-year optional school bonds of Rocksprings Dist., Edwards county, are to be sold; denomination \$500. Address A. P. Allison, County Judge.

Tex., Rogers.—\$30,000 of 5 per cent. 20-40-year school bonds of Rogers Dist., Bell county, were awarded for par and interest to Spitzer, Borick & Co. of Toledo, O.

Tex., San Angelo.—\$50,000 of high school bonds to be voted on Mch. 25 are 40-year, 5 per cents. Address City Council.

Tex., San Antonio.—City authorities contemplate, according to a report, issuing \$500,000 of refunding bonds. Clinton G. Brown is Mayor.

Tex., Timpson.—City Council has adopted resolution for an election April 7 on \$17,000 of water-works and \$10,000 of street-improvement bonds. Address B. J. Hawthorn, Mayor.

Tex., Tyler.—\$300,000 of 5 per cent. 20-40-year bonds of Road Dist. No. 2, Smith county, are reported sold at par to the State Bank & Trust Co. of Tyler.

Tex., Velasco.—\$75,000 of road bonds will soon be offered for sale by Road Dist. No. 8 of Brazoria county. Address E. P. Hoefle, Velasco, Tex.

Tex., Willis Point.—\$3000 of school bonds for Willis Point Dist. are reported voted. Address The Mayor.

Va., Gate City.—An election is reported called for April 21 to vote on \$41,000 of road bonds of Floyd Magisterial Dist. Address County Commrs.

Va., Petersburg.—Baker, Watts & Co. and Townsend Scott & Son of Baltimore have bought at private sale \$200,000 of 4½ per cent. 40-year Petersburg city improvement bonds out of a total issue of \$300,000. The other \$100,000 were taken by the city at 101 for its sinking fund. A report says that the \$200,000 were sold at a slight premium.

Va., Roanoke.—\$150,000 of 4½ per cent. 20-year city hall bonds were voted at the recent election. Address The Mayor.

W. Va., Grafton.—Election on \$95,000 of school-building bonds is to be held March 17. Address The Mayor.

W. Va., Ravenswood.—\$25,000 of water-works bonds are reported voted. Address The Mayor.

W. Va., Princeton.—\$500,000 of 5 per cent. 10-30-year Mercer county road bonds were sold to the Provident Savings Bank & Trust Co. of Cincinnati, O., at a premium of \$6253.

W. Va., Follansbee.—\$20,000 of school-building bonds of Brooke county have been voted by Cross Dist. Address County Commrs.

W. Va., Huntington.—Bids will be received until May 15 for the \$500,000 of school bonds, 5 per cent., 10-30s, recently voted. Address School Dist. Commrs.

W. Va., Parkersburg.—\$70,000 of 5 per cent. 20-30-year road bonds of Williams Dist., Wood county, have been voted; denominations, \$100, \$500 and \$1000. Address Wm. Dudley, Clerk Wood County Court.

They Want Industries.

Georgia Chamber of Commerce,
Atlanta, Ga., March 12.

Editor Manufacturers Record:

The Georgia Chamber of Commerce has sent letters to all parts of the State asking what new industries were needed, and the amount of co-operation which would be given to such enterprises. The replies have been prompt and enthusiastic, and from the compiled list it is found that 19 places want canning factories, 8 want furniture factories, 23 want lumber and woodworking plants, 19 want textiles, including hosiery; 10 want creameries, 5 want ice and refrigeration, 11 want brick and tile plants, 1 wants a skirt factory, 10 want overall and pants factory, 2 want plow factory, 3 need a new railroad, 2 supply house for electric, mill and machinery supplies; 10 want cottonseed-oil mills, 7 want fertilizer plants, 15 want cotton mills, 6 want handle factory, 18 want vehicle and wagon-parts plant, 8 want box, crate and veneering factory, 1 wants a wood pulp and paper mill, 5 want barrel and barrel-head factory, 1 wants a creosoting plant, 1 wants a shipbuilding plant (small), 1 wants a mattress factory, 1 a back-band factory, 1 a cypress shingle mill, 1 a horticultural nursery, 1

[Continued on Page 76.]

Merchants-Mechanics National Bank
 South and Water Sts. BALTIMORE MD
 DOUGLAS H. THOMAS President.
 JNO. B. RAMSAY V-P and Chm. Bd. of Dir
 WM. INGLE Vice-President.
 JOHN D. H. DUNN Cashier.
 Capital \$2,000,000 Deposits \$21,670,000
 Surplus and Profits \$2,175,000
 Accounts of Banks, Bankers Corporations and Individuals solicited.
 We invite correspondence.

Southern Steam Railroad Securities
 DEALT IN
F. J. LISMAN & CO.
 Specialists in Steam R. R. Securities
 Members New York Stock Exchange
 30 Broad Street NEW YORK
 39 Pearl Street, Hartford
 Land Title & Trust Bldg., Philadelphia

Delaware Trust Company
 Wilmington, Delaware
 INCORPORATING under broad, liberal, safe and stable Delaware laws. A fully equipped department for proper organization and registration of corporations.
 BANKING AND TRUST department gives special attention to out of town customers' accounts.
 TITLE DEPARTMENT examines and guarantees title to realty throughout Delaware.
 REALTY DEPARTMENT has sites for manufacturing industries. Modern Methods of management of property.
 J. ERNEST SMITH, President and Gen. Counsel.
 WM. G. TAYLOR, Vice-Pres. and Treasurer.
 HARRY W. DAVIS, Vice-Pres. and Secretary.
 W. W. PUSEY 2d, Title and Real Estate Officer.

The First National Bank
 OF KEY WEST, FLA.
 United States Depository and Disbursing Agent
 Capital - - - \$100,000
 Surplus and Undivided Profits - - 40,000
 A general banking business transacted
 Special attention given to collections

INVESTMENT SECURITIES
 Southern Stocks and Bonds
 Municipal and Corporation
 Cotton Mill Stock a Specialty
 WM. S. GLENN, Broker, SPARTANBURG S. C.

We Buy Bonds
 City, County, School and Road, from Municipalities and Contractors
 WRITE
THE PROVIDENT SAVINGS BANK & TRUST CO.
 CINCINNATI OHIO

THE TILLOTSON & WOLCOTT CO.
 CLEVELAND, OHIO
BUYERS OF COUNTY CITY SCHOOL AND DRAINAGE BONDS
 Correspondence Solicited



Burroughs Service

If two Burroughs Users, one in Multiwanekeg, Maine, and the other in Sydney, Australia, should disable their Burroughs the same day, each could have a substitute machine within six hours.

That is Burroughs Service, and what we are organized to give to our users.

The company that starts today, yesterday or five years ago finds this service impossible.

Can you afford to take chances?

Burroughs Adding Machine Co.
 80 Burroughs Block, Detroit, Michigan

The First National Bank
 17 South St., Baltimore, Md.
 Capital, - - - \$1,000,000
 Surplus and Net Profits, 450,000
 Deposits, - - - 8,500,000
 Especially well equipped to handle the business of Southern Banks, Corporations, Individuals and Manufacturers. We cordially invite correspondence and interviews.

The National Exchange Bank
 OF BALTIMORE, MD.
 Hopkins Place, German and Liberty Streets
 Capital, \$1,000,000
 August 9th, 1913, Surplus and Profits, \$764,091.00
 OFFICERS
 WALDO NEWCOMER, President.
 SUMMERFIELD BALDWIN, Vice-Pres.
 R. VINTON LANSDALE, Cashier.
 C. G. MORGAN, Asst. Cashier.
 Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals invited.

Edwin Warfield, President
Fidelity and Deposit Company of Maryland
 Home Office: Baltimore
 Total Assets over \$11,000,000.00
 All Kinds and Classes of Surety Bonds and Casualty Insurance
 Largest and Strongest Surety and Casualty Company in the World

FIRST NATIONAL BANK
 RICHMOND, VIRGINIA
 Capital and Surplus, - - \$3,000,000
 JNO. B. PURCELL, President
 JNO. M. MILLER, Jr., Vice-Pres.
 W. M. ADDISON, Cashier

GO SOUTH!
 FOR SALE Timber, Coal, Iron, Ranch and Other Properties
 Southern States, West Indies, Mexico
SOUTHERN STATES DEVELOPMENT CO.
 (Brokers) Geo. B. Edwards, Pres.
 Tribune Building NEW YORK, N. Y.
 Confidential Negotiations, Investigations, Settlements, Purchases of Property

WE BUY MUNICIPAL BONDS
 FROM
 Municipalities and Contractors
BREED, ELLIOTT & HARRISON,
 First Natl. Bank Bldg., CINCINNATI, OHIO

JOHN NUVEEN & CO.
 First National Bank Building CHICAGO
 We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.
 Write us if you have bonds for sale.

R. J. BEAMAN
 Certified Public Accountant
 Audits, Investigations and Accounting Systems
 Union Central Bldg. CINCINNATI, OHIO

CHECK BOOKS

Look at the imprints on checks passing through your office. If you are south of Mason and Dixon's Line and East of the Mississippi River, you will find more of our imprints than of any other. Of course there is a good reason.

When needing check books consult

Young & Selden Co.
 BANK STATIONERS BALTIMORE, MD.
 Lithographing, Printing, Envelopes
 Blank Book Makers, Book Binding
 Letter Heads, Office Supplies
 Steel Die Work

We Finance
 Electric Light, Power and Street Railway Enterprises
 With Records of Established Earnings
We Offer
 Bankers and Investment Dealers
 Proven Public Utility Securities
 Correspondence Solicited
Electric Bond and Share Company
 (Paid-up Capital and Surplus, \$12,500,000)
 71 Broadway New York

COTTON YARNS
Paulson, Linkroom & Co.
 COMMISSION MERCHANTS

NEW YORK
 87-89 Leonard Street

PHILADELPHIA
 120 Chestnut Street

CHICAGO
 206 S. Market Street



Palmetto National Bank
 COLUMBIA, S. C.

Capital
 \$250,000.00

Deposits
 \$2,700,000.00

Surplus and Profits
 \$150,000.00

WILIE JONES, President
 JOHN JACOB SEIBELS,
 Vice-President
 THOMAS TAYLOR
 2nd Vice-President

J. P. MATTHEWS, Cashier
 WM. M. GIBBS, Jr.,
 Asst. Cashier
 WESTON & AYCOCK,
 Solicitors

Direct daily connection with every banking point in South Carolina.

We Buy City, County School and Drainage **BONDS**
 FROM MUNICIPALITIES OR CONTRACTORS
 We are in position to pay HIGHEST PRICES. Write or wire us your offerings.
THE NEW FIRST NATIONAL BANK Assets, \$6,000,000 COLUMBUS, G.

Capital for Southern Industries
Peabody, Houghteling & Co.
 (Established 1865)

10 So. La Salle Street

CHICAGO, ILLINOIS

To Manufacturers and Capitalists
 Contemplating the Establishment of Industrial Enterprises
 Attention is called to the exceptionally favorable location of
NEWPORT NEWS, VA.
 on Hampton Roads, fifteen miles from the sea. Deep water, railway and sea transportation facilities unrivaled. Climate salubrious. Apply to
W. B. LIVEZEY, President OLD DOMINION LAND COMPANY
 NEWPORT NEWS, VA.

ESTABLISHED 1884
 State, City and Corporation Securities Purchased Direct or from Holders.
 Temporary Loans Arranged on Such Collateral.
 Deposits, Dec. 31, 1912.....\$ 9,132,372.15 Increase, \$1,970,862.54
 Dec. 31, 1913.....11,103,234.69
 WE PAY 3% INTEREST SUBJECT TO CHECK
 Largest Capital and Surplus of any financial institution in Maryland or south of Washington, D. C.
MERCANTILE TRUST & DEPOSIT CO.
 OF BALTIMORE
 A. H. S. POST, - - - President
 FRED G. BOYCE, Vice-President
 JOHN McHENRY, Treasurer
 WILTON SNOWDEN, Vice-President
 J. R. WALKER, "

a plant for the making of bath-room fixtures and supplies from kaolin, 1 climate-ware and pottery, 1 wants an automobile factory, 3 want meat-packing plants, 2 want cotton compresses, 1 wants a soft-drink bottling works, 1 wants a harness and horse-collar factory, 1 wants a paper-box factory, 1 wants a pickle factory, 1 wants a planing mill, 1 wants an ice-cream and candy factory, 2 have water-powers wanted developed, 1 wants a syrup refinery, 1 needs water-works and electric lights and 6 want laundries.

Many of these cities agree to co-operate financially with concerns or individuals who will establish the desired industries in their cities and towns, and information may be had from the Georgia Chamber of Commerce without charge.

WM. F. PARKHURST.

For Ice and Electric Plant.

Mayor A. B. Shibley of Tahlequah, Okla., writes to the MANUFACTURERS RECORD:

"We are in need of an ice plant as well as an electric-light plant. Situated, as we are, at a division (freight) point on the Frisco system, with a good supply of fine spring water gushing from the mountain from which to make the ice, together with our distributing facilities, I am reasonably certain that my optimistic view is justified and more when we consider the cheap fuel and abundance of the raw materials, together with the almost positive assurance that the shops, etc., will be greatly increased here very shortly."

Improvements at Austin.

Chamber of Commerce,
Austin, Tex., March 12.

Editor Manufacturers Record:

The Chamber of Commerce is moving for the building of a bitulithic road about one mile and a half long connecting the street pavements with the dam and form-

ing a splendid driveway. The municipal authorities will shortly call for bids for a modern abattoir, a market and incinerating plant and an up-to-date fire-alarm system. The city has just received a first-class automobile hose truck and chemical cart combined, and is arranging for an automobile hook and ladder and extension ladder fire-fighting apparatus. This is the second auto fire truck the city has bought, and with the installation of the new alarm system the city will be well equipped with fire-fighting apparatus.

In Interest of Industry.

J. J. Garmon, Teague, Tex., writes to the MANUFACTURERS RECORD:

"I consider you are certainly doing a very valuable and commendable work among the manufacturers, consumers and operators over the entire country. You are publishing one of the largest and most reliable publications of its kind in the world, and it naturally fills a place unsurpassed by any similar journal in the interest of the great industrial and mechanical world."

Diversified Farming Campaign.

Commissioner H. E. Blakeslee of the department of agriculture and commerce of Mississippi, writing from Jackson to the MANUFACTURERS RECORD, says:

"Beginning on the 30th day of March, and continuing for 10 days, there will be conducted throughout several counties in South Mississippi a diversified farming campaign, under the auspices of the United States Department of Agriculture, the State Department of Agriculture, the Agricultural and Mechanical College and the extension department of the International Harvester Co. For instance, the campaign in Hinds county will be conducted from Jackson. Four routes have been selected, and we will run about five

or six autos on each route. Lectures will be made at four points on each of the four routes, which will give us 16 lecture points in Hinds county in a single day."

Working for a Cotton Factory.

Commercial Club,

Kennett, Mo., March 9.

Editor Manufacturers Record:

This organization is trying to secure a cotton factory and a mattress factory for Kennett. Kennett is the principal town of Dunklin county, which is the largest producer of high-grade cotton in Missouri. The county's average annual cotton crop is about 30,000 bales, not including linters. The cotton raised in this territory is of an exceptionally long and fine staple. We are surrounded by counties in Southeast Missouri and Northeast Arkansas that produce large quantities of the same high-grade cotton. Our shipping facilities in every direction are good.

We also have a large local supply of linters, the short staple, inferior cotton obtained by cotton-oil mills, which is largely used in the manufacture of mattresses. This would be an excellent location for a factory to use this grade cotton.

Substantial inducements will be offered by Kennett for the location of a cotton mill and a mattress factory.

T. H. MASTERSON, Secretary.

Literary Notes.

From the Letter Files of S. W. Johnson. Edited by his daughter, Elizabeth A. Osborne. Publisher, Yale University Press. Price \$2.50.

Samuel William Johnson, professor of agricultural chemistry in Yale University from 1856 to 1896, and director of the Connecticut agricultural experiment station from 1877 to 1900, was one of a small group of American chemists who more than 50 years ago undertook to apply chemical science to the industries of the country. Johnson spent his whole life training workers in this field and cultivating a public appreciation of the value of applied chemistry to productive occupations. Before he had reached manhood

he was a contributor to the agricultural press of the country and was a voluminous writer in that field for probably 60 years. His bibliography, including seven formal volumes, six official reports and contributions of scientific and educational character to periodicals fills 12 pages of the volume edited by his daughter. He was one of the pioneers in the work of developing institutions and methods for the extension of the knowledge of chemistry and its practical application and to his sure grasp of chemical problems and his prophetic appreciation of the advantages to be gained is attributed much of the power in the campaign which finally brought about the establishment of the agricultural experiment station as a national institution. His letters brought together in this volume enable one to read his personal and intellectual history fully.

Floods and Levees of the Mississippi River. By Hon. Benjamin G. Humphreys, member of Congress from Mississippi. Publisher, the Mississippi River Levee Association, Memphis, Tenn.

This volume is designed to demonstrate that the levee system is the only means by which floods in the Mississippi can be controlled; that the riparian owners should not be compelled to contribute toward levee construction more than is contemplated in proposed legislation; that Congress has ample and full power under the Constitution to warrant the appropriation, and that the benefits which would accrue to all the people from the legislation are so great and involving so enormous a contribution to the aggregate wealth of the country as to constitute a truly national problem. The volume contains endorsements of statesmen, past and present, a history of the levee system, an account of the long fight for Federal aid, a study of levees under the administration of the Mississippi River Commission, the relation of levees to interstate commerce, the Mississippi River and the Panama Canal and the constitutional questions involved.

HASKINS & SELLS
Certified Public Accountants
30 Broad St., NEW YORK
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London, E. C., 30 Coleman St
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Chicago Cleveland Baltimore
St. Louis Pittsburgh San Francisco

ANNOUNCE
the removal of their
BALTIMORE OFFICE
FROM THE
Equitable Building to the
CALVERT BUILDING
Telephone No. St. Paul 5220 (Unchanged.)
MARCH 9, 1914

RUSSELL G RANKIN
Public Accountant
Southern Building
WASHINGTON, D. C.
REFERENCES: WASHINGTON BANKS

VIRGINIA POLYTECHNIC
INSTITUTE
(State Agricultural and Mechanical College)
School of Mining Engineering
Offers a four years' course leading to the degree of Bachelor of Science in Mining Engineering. Full teaching force, well-equipped shops and laboratories. Adjacent to celebrated Pocahontas coal fields. Total cost per year, including board, room, light, heat, laundry and medical attendance, \$281; to State students, \$231.

J. D. EGGLESTON, Pres.
Blacksburg, Va.

PROPOSALS
Continued from Page 81.

MISCELLANEOUS

Aluminum Sulphate

Office of Superintendent,
City Water-Works,
Room 103, City Hall,

Richmond, Va., March 3, 1914.

Sealed proposals will be received in this office until 12 M. March 24, 1914, for furnishing seven hundred (700) tons aluminum sulphate, high basicity, for water clarification, containing from seventeen to twenty-two per cent. aluminum oxide, delivered f. o. b. Korah Station, Chesapeake & Ohio Railway, in barrels, at such time and in such quantity as the superintendent may require.

Further information can be obtained from this office. The Administrative Board reserves the right to reject any or all proposals, or any part of any or all proposals, also to increase or decrease the specified quantities twenty per cent.

A certified check for two hundred dollars, payable to the City Treasurer, must accompany each bid.

Proposals must be submitted in sealed envelopes, containing the name and address of the bidder, directed to the Administrative Board, and in the lower left-hand corner must be written "Proposal for Aluminum Sulphate."

Bond will be required on contract.

E. E. DAVIS,
Superintendent.

Remodeling County Jail

NOTICE TO CONTRACTORS.

Bids will be received by J. E. Camp, Judge of Probate, for remodeling of Talladega County Jail at Talladega, Ala., on April 13, 1914. All bids shall be accompanied by a certified check for \$100, payable to J. E. Camp, conditioned on terms of specifications. Plans and specifications may be seen at the office of Harry B. Wheelock, Architect, Birmingham, Ala.

Notice to Steel Cage Builders

West Point, Miss.

Notice is hereby given that the Board of Supervisors of Clay County, Miss., will receive bids on steel convict cages on April 6, 1914, at the Courthouse in West Point, Miss.
L. J. HOWARD, Clerk.

Shell Crusher and Gasoline Engine

NOTICE TO MANUFACTURERS.

Bay St. Louis, Miss.

Sealed bids will be received by the Board of Mayor and Aldermen of the City of Bay St. Louis, Mississippi, until 3:30 P. M. April 4, 1914, for a shell crusher to crush green shells for road purposes, capacity from 20 to 40 tons, fully equipped, and one gasoline engine to run or operate the above crusher. The Board reserves the right to reject any and all bids.

R. F. O'BRIEN,

Bay St. Louis, Miss., March 7, 1914.

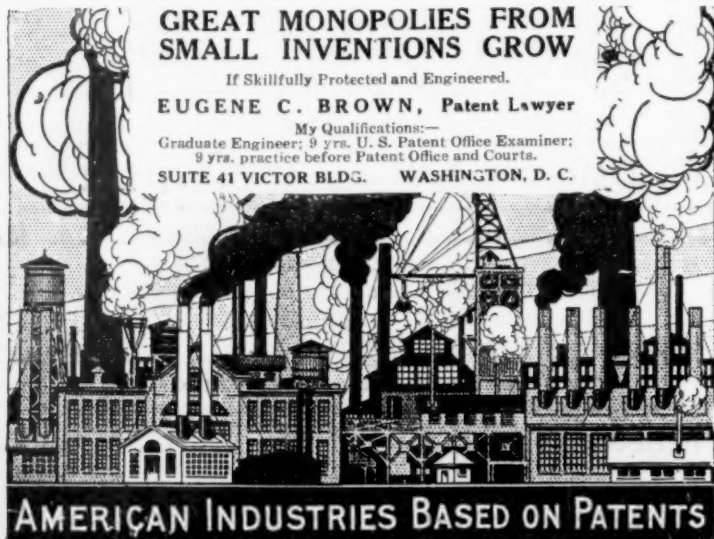
Proposals for Bulkheading

Sanford, Fla.

Notice is hereby given that sealed bids will be received at the office of the City Clerk of the City of Sanford, Florida, up to 7:30 P. M. April 6, 1914, for the construction of a retaining wall approximately 300 feet long, filling in behind the same 25,000 cubic yards of earth, and extending sewer through the made land. Each bid to be accompanied by a certified check for \$500, made payable to the City of Sanford. The Council reserves the right to reject any or all bids. Plans and specifications can be secured from the City Clerk on deposit of \$5, the same to be refunded when they are returned.

M. W. LOWELL,
City Clerk.

GREAT MONOPOLIES FROM SMALL INVENTIONS GROW
If Skillfully Protected and Engineered.
EUGENE C. BROWN, Patent Lawyer
My Qualifications:—
Graduate Engineer; 9 yrs. U. S. Patent Office Examiner;
9 yrs. practice before Patent Office and Courts.
SUITE 41 VICTOR BLDG. WASHINGTON, D. C.

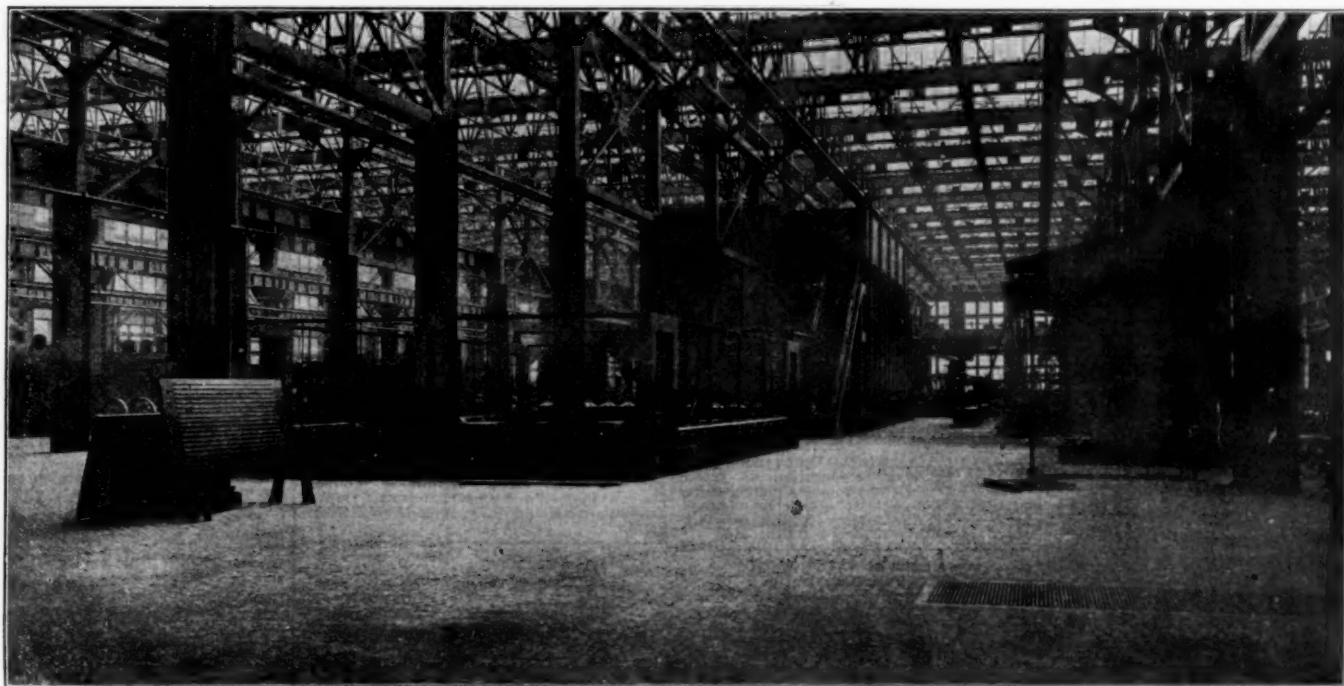


AMERICAN INDUSTRIES BASED ON PATENTS

Wood Block Pavement

Best Floor for Shops

Cement floors for machine shops are out of date and are everywhere being discarded for wood block pavements. As used in shops, wood block pavement consists of wooden blocks impregnated with creosote by a vacuum process to prevent decay, and laid with the grain vertical on a plank or cement floor, the joints being filled with pitch.



Wood Block Floor in D. L. & W. R. R. Shops, Scranton, Pa.

Such a floor will not abrade, and heavy castings can be handled and trucked on it without pulverizing it, and without injury to the castings themselves.

Workmen can stand on these floors, just as on a board floor, without suffering from chills or tired feet.

The floors can be flushed with a hose if this is desirable.

The floor will outlast the shop and will never need renewal or repairs. Oil drip-

pings, steel shavings and other debris cannot hurt a wood block floor.

Wood blocks are being used in great machine shops, locomotive works, railroad repair shops, automobile factories, stables, shipping platforms, and yards where coal and iron are dumped and shovelled—in fact wherever traffic is hard and other pavements fail.

These are exactly the same wood blocks used for the paving of such streets as Lower Broadway in New York, or the streets in the Loop District of Chicago.

Booklets free on request.

U. S. WOOD PRESERVING COMPANY
165 Broadway, New York City

Classified Advertisements

MEN WANTED

THE City Commission of the city of Lakeland, Florida, will employ a municipal manager on or before April 1, 1914. Applications, with return postage, stating qualifications and salary expected, should be mailed to H. L. Swatts, Clerk.

WANTED—Cotton buyer and ginner in community of 3500 people; nearest competition 7 miles; excellent opportunity. Bradford County Abstract Company, Starke, Fla.

SALESMAN—BUILDING TRADE.—One thoroughly acquainted with architects and contractors to sell high-class building specialty in your vicinity. Commission basis only, from the start. Leads furnished. References required. Address No. 1475, care Manufacturers Record, Balto., Md.

WANTED—Strictly up-to-date furniture specialties man as general foreman; must invest at least \$2500; also machine men and cabinetmakers, who must invest at least \$500 each. All investments absolutely secured. For further information address Pacific Furniture Specialties Mfg. Co., Inc., 418-419 Lumber Exchange Bldg., Portland, Oregon.

WANTED—Salesman to sell our "Ohio" fly swatter to the trade as a side line on a commission basis. A good proposition. The Ohio Stove Pipe & Mfg. Co., New Philadelphia, Ohio.

WANTED—Experienced foreman for machine shop; must be strictly sober and reliable, able to handle men and get out production at reasonable cash. New work. Address P. O. Box 232, Charlotte, N. C.

CORRESPONDENCE is solicited with a view of securing services of a practical trained business man. We are looking for a man with executive ability and who is in a position to invest some money (amount unimportant) to participate actively in a Southern manufacturing enterprise as officer in the company. Address No. 1494, care Manufacturers Record, Balto., Md.

AGENTS WANTED among supply dealers and salesmen for an exceptional house-lighting machine, suitable for small homes as well as large; simple, durable, economical; satisfaction guaranteed to customers; has excellent selling points; a live proposition. Write for terms. The Alexander N. Milburn Co., Baltimore, Md.

WANTED—An office man with \$2000 to join me in an engineering proposition in the South. The field has hardly been touched yet. It is one of the best things going today. Address No. 1481, care Manufacturers Record, Balto., Md.

WANTED—A HIGHWAY ENGINEER on construction of a \$200,000 road system, either macadam or gravel. None but competent, honest and experienced road-building expert, capable of transforming the above funds into a finished first-class job, need apply. State age, experience (detailed experience relative to road work), references and salary expected. Address Geo. L. Huffman, County Judge, Marshall, Tex.

AGENCIES WANTED

GERMANY.—We want to represent American manufacturers in Germany. H. Drawe & Co., Agents, Frankfurt a. M., Germany.

WANTED—Accounts with manufacturers desiring representation in supplies for fruit growers for Virginia; two years' experience in fruit industry. Address No. 1490, care Manufacturers Record, Balto., Md.

FOREIGN REPRESENTATIVE returning to London early in April desires additional sales agencies covering British Isles and Europe. Personal interview desired. J. J. Blow, 172 Rodney St., Brooklyn, N. Y.

WANTED—Sales agency for all lines pertaining to builders' specialties; East Tennessee as territory; can furnish satisfactory references to interested concern; modern warehouse facilities. Address Daniel Briscoe, Jr., 325-327 State St., Knoxville, Tenn.

WANTED—By a salesman of wide experience complete furniture line for Northwest S. C. on a strictly commission basis. Can furnish references that will satisfy any manufacturer. Expect to carry furniture only, and work small territory closely, with a view to building a permanent business. Address P. O. Box No. 81, Greenwood, S. C.

BUSINESS MAN, 34, with wide selling experience and corporation training, desires to represent as manufacturer's agent in Baltimore, Philadelphia and New York, two or three responsible Southern or Western concerns, preferably manufacturers, on commission basis. Satisfactory references. Address No. 1485, care Manufacturers Record, Balto., Md.

MR. MANUFACTURER!—Have you a high-grade mechanical or building specialty which you wish introduced in the "Panama States"? Are you looking for a man to handle your product who knows the people and whose road experience has acquainted him with its local conditions?

Do you require a man not only of experience and ability, of good education and address, but upon whose integrity you can absolutely rely? Then write to No. 1474, care Manufacturers Record, Balto., Md.

RATES AND CONDITIONS

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 25 lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 18c per line, 300 lines 15c per line; 500 lines or more 15c per line.

SITUATIONS WANTED

DRAUGHTSMAN, skilled, change; salary not important. Address Williams, 38 Schermerhorn St., Brooklyn, N. Y.

MECHANICAL ENGINEER, 29, varied manufacturing and executive experience, qualified for sales-engineer or assistant to executive, now engaged, but desires change. No. 1491, care Manufacturers Record, Balto., Md.

GENERAL FOREMAN that can handle all kinds of work desires position; will go anywhere; 10 years' experience; concrete preferred; employed at present. Address No. 1497, care Manufacturers Record, Balto., Md.

YOUNG MAN would make small investment with services; now holding position of responsibility in South; educated, good business training; experience in executive, salesmanship and management. Address No. 1493, care Manufacturers Record, Balto., Md.

A SUPERINTENDENT who has had 20 years' experience as superintendent and estimator for high-class buildings is open for position with good builder; can furnish first-class references. Write Superintendent, 915 Main St., Fredericksburg, Va.

A-1 SALESMAN of broad experience, clean, successful record, desires change for satisfactory reasons; single, 30; acquaintance entire South, covering South for Southern mfr.; specialty experience; highest credentials furnished as to ability and character. No. 1495, care Manufacturers Record, Balto., Md.

TRAFFIC MANAGER.—Young man, now employed by large corporation as traffic manager and assistant to sales manager, desires to make change; also competent to handle credits and buying. Address No. 1473, care Manufacturers Record, Balto., Md.

TECHNICAL GRADUATE, experienced as salesman, wishes position traveling in the South, representing the cotton-oil and fertilizer machinery interests; has full knowledge of cotton-oil manufacturing and is well acquainted with purchasing agents, general managers and superintendents in the industry. Address No. 1484, care Manufacturers Record, Balto., Md.

PRACTICAL SUPT. desires change from present position; experienced miner, mill designer, mine, land and railroad surveyor; technical chemist, graduate in mining. Metallurgy. Consulting. Iron, Manganese, Coal, Limestone. Address 1492, care Manufacturers Record, Balto., Md.

CHANGE OF LOCATION desired for family reasons by a man who has been doing things in connection with land and city development work and in chamber of commerce work, and is now in charge of the chamber of commerce in one of the most active and agriculturally important sections of California. Will consider proposition submitted through P. H. LaBaume, Agr. and Ind. Agt., Norfolk & Western R. R., Roanoke, Va.

A-1 MACHINIST wishes connection in Latin-America; best reference. Address No. 1487, care Manufacturers Record, Balto., Md.

POSITION with a growing industrial concern in Central Virginia or North Carolina, with opportunity to advance, by progressive, capable, experienced accountant and office man; best references. David S. Packard, 1805 Park Road N. W., Washington, D. C.

EDUCATIONAL

RENSSELAER POLYTECHNIC INSTITUTE, TROY, N. Y.—Courses in Civil, Mechanical, Electrical and Chemical Engineering and General Science, leading to the degree of Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), Chemical Engineer (Ch.E.), and Bachelor of Science (B.S.). Also special courses. Splendidly equipped new engineering laboratories. Send for catalogue to Registrar.

HOTEL WANTED

WANTED—Hotel, 20,000 city, one most prosperous South, growing very rapidly. Citizens will take half stock. Address No. 1485, care Manufacturers Record, Balto., Md.

BUSINESS OPPORTUNITIES

REAL ESTATE MEN can turn over some quick sales by listing the low-priced, small-acreage farms we have opened on our line. Address J. R. McConnell, R. & C. R. R., Carthage, N. C.

FOR SALE.—The leading furniture business in the city of Valdosta. Good reason for selling. Everything up to date in this line. Can make terms to the right party. J. G. Mackey Real Estate Co., Valdosta, Ga.

FOR SALE.—State rights, patent just issued, unequalled mail-order article; unlimited commercial value; no competition; big profits; millions need it. Address P. O. Box 126, Savannah, Ga.

WANTED—Partner in established poultry plant; excellent opportunity; fine profits; experience not necessary; with or without services. P. O. Box 562, Lakeland, Fla.

WANTED—A partner with \$10,000 or more; must give some time to the business. I have a staple line of sheet-metal articles to manufacture. I own some real estate and have a business going. Those seeking a commission need not answer. Address Doltbetter, care Manufacturers Record, Balto., Md.

WANTED—Sell entire stock finest Fishel-Stalin White Plymouth Rock chickens; sacrifice, quick; best blooded prize winners. White Rock Poultry Farm, Lakeland, Fla.

WANTED—NORTH CAROLINA TIMBER LAND.—To exchange for clear and unincumbered Washington City property, 9 three and four family flats, for timber. I am constantly in need of large Southern tracts for sale and exchange, for good residence income and business properties, in Washington and other cities. Arthur M. Connor, Farms, Timber and Coal Lands, 224 Oxford Building, 14th and N. Y. Ave. N. W., Washington, D. C.

FINE BARGAIN in modern, up-to-date brick plant near Atlanta, capacity 30,000, now in operation; unexcelled body fine river clay; good territory; investment paying profit; prefer partner to take half interest, but would sell all. Investigation solicited. Address R. Price, 308 Candler Bldg., Atlanta, Ga.

CATTLE RANCH.—Have 12,000 acres good grazing land; want young man to put in some money and take active interest in cattle proposition. Experience not necessary. No. 1496, care Manufacturers Record, Balto., Md.

FOR SALE OR LEASE.—Famous Tennessee summer and winter resort having fine mineral waters which are very popular over the South, being shipped to all Southern States; located within short distance of large city; fine location; high elevation; beautiful scenery. With some expenditure would be the biggest and most popular resort anywhere. If interested, address No. 1486, care Manufacturers Record, Balto., Md.

AN INTEREST, together with active management at good salary, is offered for sale in a new light and ice plant in good small town in the best section of South Texas. Proposition will bear strictest investigation. Party must be a thorough steam and refrigerating engineer and highly recommended. Must have at least \$5000. Address No. 1472, care Manufacturers Record, Balto., Md.

WANTED—Partner, with or without services, experience not necessary, in 20-year established fruit and vegetable brokerage business. Apply P. O. Box 562, Lakeland, Fla.

WANTED—To connect with brokers or individuals who can place a part or all of \$25,000 worth of good first mortgages on improved property in Richmond, Va. Liberal commission allowed. Address No. 1452, care Manufacturers Record, Balto., Md.

EIGHT THOUSAND (\$8000) DOLLARS will buy half interest in a machinery and sawmill supply business in a Southern city, which business showed a profit of \$6200 in 1913. Great possibilities for a practical man who would be willing to travel. Address No. 1480, care Manufacturers Record, Balto., Md.

MODELS

MODELS MADE FOR INVENTORS.—General machine work. Designing and perfecting. Developing automatic devices and machinery. In a position to do all kinds of light tool and machine work. Prices reasonable. Estimates cheerfully given. Ideal Machine Works, 64 Ann Street, New York City.

FACTORY SITES

FOR SALE.—As a whole or in part, 42 acres smooth and level land, lying between and adjoining two railroads in the suburbs of Hagerstown, Md. Splendid facilities and special inducements for manufacturing purposes. Address Bower & Bower, First National Bank Bldg., Hagerstown, Md.

INDUSTRIES WANTED

MISCELLANEOUS

HENRIETTA, TEX., offers unlimited supply natural gas 4c. to manufacturers; fire brick, tile shales; water; low taxes; healthful; 3 railroads; unusual opportunity legitimate enterprises. Address Booster Club.

BLUEFIELD, WEST VIRGINIA, the gateway to the vast Pocahontas coal fields, and the distributing point for half a million contented laborers, needs an overall factory, needs a mine implement factory, and needs a brick plant. Address C. T. Boykin, Secretary Bluefield Chamber of Commerce.

A SMALL RAILROAD will do more to meet your requirements than a large one. The Randolph & Cumberland R. R. is in the undeveloped section of North Carolina's best region, and on this line are splendid opportunities and an open field for a woodworking plant, cannery, brick plant, cotton or hosiery mill, besides other industries. We also have splendid low-priced farm lands in our territory. Write to J. R. McConnell, Industrial Agent, R. & C. R. R., Carthage, N. C.

WAREHOUSE FOR LEASE

FOR LEASE—CHOICE WAREHOUSE.—2-story brick, plate-glass front, 13,800 sq. ft., S. E. Cor. Markham and Commerce. Liberal terms to responsible tenant. Wehrfritz Mely. Supply Co., 117 Commerce, Little Rock, Ark.

BUSINESS PROPERTY FOR RENT

HANDSOME BUSINESS HOUSE IN LAKELAND FOR RENT.—A big opening for a large business to be managed by a wide-awake business man. In one of the best locations in the State for a department store or a mail-order house, or a big supply business, such as heavy machinery, buggies, wagons and farming implements. This store is located in Lakeland, Fla., on the main street. No better location in the city. This is a two-story brick building, and has 16,000 feet of floor space. Has a 16-foot balcony around the entire building. Electric elevator in the rear. The main body of the store is 47 by 127 feet. Lakeland has about 10,000 inhabitants and is busy the year around. We have 30 passenger trains in and out of Lakeland daily. If you are interested in this proposition, wire, phone or write J. W. Kimbrough, owner, Lakeland, Fla.

INDUSTRIAL PLANTS FOR SALE

BRICK PLANTS

BRICK PLANT.—Good-paying 20,000 capacity plant, located where local demand takes entire output; abundance of best brick material; a sacrifice for quick sale; age and health of owners reason for selling; will trade for good farm. Guy D. Moore & Co., 7 P. O. Bldg., Tulsa, Okla.

OIL REFINERY

COMPLETE OIL REFINERY to be sold at public sale on April 23, 1914. Located at Fort Smith, Ark. For full particulars address Charles J. Jewett, Receiver, Fort Smith, Ark.

SCREEN DOOR AND ELECTRIC LIGHT PLANTS

ASSIGNEE MUST SELL.—Screen-door factory, capacity 500 doors per day; electric light plant with 20-year franchise, in growing city. Address L. L. Thompson, Lilbourne, Mo.

MINERAL AND TIMBER LANDS, WATER POWERS AND MISCELLANEOUS PROPERTIES

FOR SALE.—Orange groves, farms, cut-over lands, timber lands of all kinds, and brokerage. Address George A. Mawman, 109 Second St., Palatka, Florida.

FOR SALE.—140-acre farm, cottage, 40-room hotel, mineral waters, boating, fishing, mountains nearby, railroad 2 miles. \$5000. Address Doak Aydelott, Tullahoma, Tenn.

MAGNETIC IRON MINE

FOR SALE.—Magnetic iron mine; high grade ore; veins exposed total 60 feet; 2 R. R.; now shipping on contract; good reason for selling; 120 acres. Address Chas. H. Brown, 1605 Dandridge Ave., Knoxville, Tenn.

CITY PROPERTY

FOR SALE.—40 acres, all ready for an auction. Divided into 171 lots, only 4 blocks from the Government building; a splendid opportunity for someone to double his money. J. G. Mackey Real Estate Co., Valdosta, Ga.